

11-1-1885

Report of the Governor of Washington Territory, 1885

Follow this and additional works at: <https://digitalcommons.law.ou.edu/indianserialset>



Part of the [Indian and Aboriginal Law Commons](#)

Recommended Citation

H.R. Exec. Doc. No. 1, 49th Cong., 1st Sess. (1885)

This House Executive Document is brought to you for free and open access by University of Oklahoma College of Law Digital Commons. It has been accepted for inclusion in American Indian and Alaskan Native Documents in the Congressional Serial Set: 1817-1899 by an authorized administrator of University of Oklahoma College of Law Digital Commons. For more information, please contact darinfox@ou.edu.

REPORT

OF

THE GOVERNOR OF WASHINGTON TERRITORY.

EXECUTIVE OFFICE,
Olympia, Wash., November 1, 1885.

SIR: Despite many drawbacks, the year has been one of substantial advancement.

Although speculation has been temporarily checked, the entries of public land less numerous, and the influx of immigrants less rapid, yet the important basilar industries of the country, such as wheat-raising east of the mountains, and lumbering and coal mining on the western coast, have moved forward with increased momentum, so that the aggregate production has far surpassed that of any former year in the history of the Territory.

The new population, which, on its first arrival, hived in the populous cities, has largely betaken itself to the country to engage in production.

An immensely increased acreage of wheat has been tilled and an unparalleled crop has been realized. Immense new lumber mills have been constructed, and the forest has been penetrated with iron tramways for procuring timber.

The most valuable veins of coal yet worked have been reached by railway, and their production has been shipped in great quantities to the seaboard.

Iron ore, found in abundance and of the first quality, has been carefully tested, and arrangements are being made to bring it to tide-water.

Many miles of railway have been built by the Oregon Railway and Navigation Company, running into the wheat-fields of Eastern Washington, and the Northern Pacific Railroad Company has been almost constantly at work on its Cascade division, which now lacks less than 80 miles of grading to complete this most important connection between the two great sections of the Territory divided by the mountain range.

Stock-raising, dairying, and fruit culture have progressed under the most favorable circumstances of soil, climate, and good markets. The crop of hops has been great and excellent.

Commercially our importance is being better understood in the East since the recent dispatch of train-loads of Chinese tea from Puget Sound across the continent to New York in the short period of eight days and four hours.

While the work of building up and improving the towns and cities has been perceptibly slackened, thus creating less demand than heretofore for the labor of a certain class of artisans, yet, with rare exceptions, a good feeling and healthy business tone, relative to our resources and development, pervade the community, imparting confidence in the immediate future.

POPULATION AND ASSESSED VALUE OF PROPERTY.

The census returns of the Territory are notoriously incomplete, and cannot be taken as a true and sufficient exhibit of the actual population.

The census returns made by the Territory in 1883 show the total population at that time to have been 92,508. The census returns taken by the county assessors in the spring of 1885 show the census then to have been 129,438, an increase during the two years of 36,930.

The Territorial auditor writes me as follows: "Had the census been properly taken under an adequate law, the population for 1885 would have certainly been shown to be above 175,000."

In corroboration of the auditor's opinion it should be stated that the election tables of 1884 show a total vote of 41,842, of which 8,368 were females, leaving a total male vote of 33,474.

By the census of 1880 (before the law enfranchising women was passed) it was established that the ratio of population to the voter was 4.7; this would give us a population as expressed by the vote of 1884 of 157,356 at that time. And inasmuch as a constant stream of immigration has been pouring into the Territory for one year since that vote was taken, there is a strong probability that our present population actually amounts to 175,000 persons.

The total assessed valuation of property in the Territory for the year 1884 was \$50,508,484, and for the year 1885 it was \$50,484,437. The decrease is caused by the shrinkage in property valuation and by the non-listing and non-assessment of railroad property within the Territory. As for example, in the two counties of King and Thurston alone, there is a decrease because of the above reasons of about \$5,000,000 in property valuations.

The reason why railroad property was not assessed is because of the Territorial law passed in 1883, providing that railroad companies should be taxed on their gross earnings.

TAXES AND FINANCIAL CONDITION.

The rate of taxation for Territorial purposes is 2½ mills on the dollar, and the total cash revenue derived from tax on property for the twenty-one months ending June 30, 1885, is \$181,450.58, and total disbursements during the same period amount to \$137,166.44, leaving a net excess of receipts over expenditures of \$44,284.44, to which may be added the cash in Treasury of September 30, 1883, leaving on June 30, 1885, a cash balance in the Treasury of \$72,597.27, exclusive of the sum of \$8,503.83, collected under a special tax levied for building a new Territorial penitentiary.

This exhibit of the financial condition of the Territory is certainly very gratifying, and indicates its assured prosperity.

Ten years ago the Territory was \$22,000 in debt, and paying a heavy rate of interest thereon. The revenues were then insufficient to meet current expenses and accumulating interest, and the rate of taxation at that time was 4 mills on the dollar. Since 1879 there has been no indebtedness. Liberal appropriations have been made for humane objects and the proper administration of the laws. The Territory may now be said to stand free from any financial obligation and with an available surplus of nearly \$100,000 at its command.

TERRITORIAL CENSUS.

I append detailed statements of census returns and comparative tables of population and property valuation in the several counties in the Territory, and I would call attention to the great disproportion between the numbers of the two sexes, there being 56 per cent. more males than females.

Statement showing abstract of census returns of each county for the year 1885, together with the total population of the Territory.

County.	Males.	Females.	White.	Black.	Mulatto.	Kanakas.	Chinese.	Indian half-breeds.	Married.	Single.
Adams	237	139	376						137	.....
Asotin	863	652	1,487				9	19	551	.....
Chehalis	1,395	1,007	2,369				33		850	.....
Clallam	449	248	580				8	109	194	208
Clarke	4,370	3,300	7,493				97	81	2,485	1,135
Columbia	3,211	2,695	5,856				50		2,174	.....
Cowlitz	1,693	1,252	2,788		3		11	143	999	.....
Douglas	254	108	346				16		108	.....
Franklin	189	76	228				34	3	91	.....
Garfield	1,941	1,510	3,442				9		1,221	.....
Island	585	347	822			1	30	79	231	188
Jefferson	1,857	784	2,340		3		95	203	625	1,020
King	10,347	5,813	14,957	20	20	4	967	192	5,325	4,537
Kittitas	1,693	1,058	2,656	1			57	37	891	869
Kitsap	1,959	679	2,308	8	1	12	183	121	670	.....
Klickitat	2,842	2,131	4,964		5		4		1,747	.....
Lewis	2,782	2,251	4,837				31	165		.....
Lincoln	2,540	1,707	4,185	2			33	27	1,539	.....
Mason	522	287	740				8	61	240	.....
Pacific	1,216	732	1,817				84	47	590	.....
Pierce	7,451	4,114	10,386	18	16	33	959	126	3,786	2,870
San Juan	599	454	740				4	309	335	85
Skagit	1,728	1,088	2,612		1		40	163	865	.....
Skamania	384	241	527		2	3	13	80	184	116
Snohomish	1,544	935	2,230				4	245	688	.....
Spokane	5,036	3,855	8,776	4	2		58	21	3,075	.....
Stevens	806	472	990				10	278		.....
Thurston	2,624	1,713	4,081	17	1		203	35	1,384	1,034
Wahkiakum	800	565	1,188				8	169	406	273
Walla Walla	6,857	3,455	10,188		14	1	107	2	2,669	.....
Whatcom	1,819	1,276	3,036	1			9	49	1,057	.....
Whitman	5,904	4,569	10,420	30	2	2	16	3		.....
Yakima	2,241	1,187	3,324	3	5	1	86	19	1,055	.....
Total	78,738	50,700	123,089	104	75	57	3,276	2,786	36,172	26,335

Statement showing abstract of census returns of each county, &c.—Continued.

County.	Over fifteen years.		Deaf dumb, blind, insane.	Citizens of United States over twenty-one.		Aliens over twenty-one.		Total population.
	Cannot read.	Cannot write.		Male.	Female.	Male.	Female.	
Adams				134	71			376
Asotin	5			462	277	8	2	1,515
Chehalis				744	422	1		2,402
Clallam	10	11	2	243	96	13	3	697
Clarke	28	31	6	2,052	1,214	39	9	7,670
Columbia	20	25	1	1,585	1,136	48	7	5,906
Cowlitz	32	38		875	470	20	4	2,945
Douglas	2	3		162	52	16		362
Franklin	1			97	36	34		265
Garfield	1	6		996	625			3,451
Island				291	119	36	3	932
Jefferson				1,003	365	72	7	2,641
King	833	841	3	5,401	2,566	1,365	156	16,160
Kittitas	20	16	1	931	437	5	1	2,751
Kitsap	36	36	1	1,077	281	427	14	2,638
Klickitat	6	10	2	1,395	784	62	51	4,973
Lewis								5,033
Lincoln				1,449	719	44	31	4,247
Mason				311	128	23	2	809
Pacific	29	30	1	495	317	78	18	1,948
Pierce	180	205	3	3,696	1,812	787	120	11,565
San Juan	10	10		160	87	154	85	1,053
Skagit	1	1		1,088	443	22	1	2,816
Skamania				183	95	9	1	625
Snohomish	5			848				2,479
Spokane	12	17	1	2,809	1,674	84	31	8,891
Stevens								1,278
Thurston	9	11	7	1,288	791	75	12	4,337
Wahkiakum	4	6		364	123	84	85	1,365
Walla Walla								10,312
Whatcom				1,047	528	26	5	3,095
Whitman								10,473
Yakima	3	3	1	1,313	506	41	9	3,428
Total	1,247	1,300	29	32,499	16,174	3,573	657	129,438

Comparative table, population of Washington Territory.

County.	1883.	1885.	Increase.	Decrease.	County.	1883.	1885.	Increase.	Decrease.
*Adams		376	376		Mason	656	809	153	
*Asotin		1,515	1,515		Pacific	1,468	1,948	480	
Chehalis	1,290	2,402	1,112		Pierce	6,177	11,565	5,388	
Clallam	553	697	144		San Juan	1,080	1,053		27
Clarke	6,211	7,670	1,459		*Skagit		2,816	2,816	
Columbia	5,139	5,906	767		Skamania	537	625	88	
Cowlitz	2,029	2,945	916		Snohomish	1,638	2,479	841	
*Douglas		362	362		Spokane	9,328	3,891		437
*Franklin		265	265		Stevens	780	1,278	498	
Garfield	3,500	3,451		49	Thurston	2,720	4,337	1,617	
Island	777	932	155		Wahkiakum	1,014	1,365	351	
Jefferson	2,850	2,641	291		Walla Walla	3,005	10,312	2,307	
King	10,242	16,160	5,918		Whatcom	3,688	3,095		573
*Kittitas		2,751	2,751		Whitman	9,173	10,473	1,300	
Kitsap	2,065	2,638	573		Yakima	3,387	3,428	41	
Klickitat	4,071	4,975	902						
Lewis	4,650	5,033	383		Total	92,508	129,438	38,016	1,086
*Lincoln		4,247	4,247		Increase				34,930

* New county, organized since 1883.

Statement showing the number of acres of land assessed, the total amounts and assessed value of all property returned by the several counties, and the taxes levied thereon, in kind and totals, for the year 1884.

Counties.	Land assessed.	Real estate.	Value of improvements to real estate.	Personal property.	All taxable property assessed.	Penitentiary fund tax levy.
	<i>Acres.</i>					
Adams	24, 541	\$62, 965	\$3, 350	\$97, 351	\$175, 444	\$43 55
Asotin	42, 918	137, 676	40, 211	227, 021	404, 908	101 22
Chehalis	225, 371	689, 181	68, 013	246, 753	1, 014, 751	253 68
Clallam .....	.....	93, 797	49, 785	87, 258	230, 840	55 07
Clarke	170, 354	748, 300	330, 230	575, 770	1, 654, 300	413 57
Columbia	148, 836	1, 142, 120	461, 080	1, 291, 370	2, 894, 570	723 64
Cowlitz	123, 872	324, 943	87, 744	300, 878	713, 565	178 39
Douglas .....	.....	.....	.....	.....	.....	.....
Franklin	1, 879	14, 853	6, 367	133, 151	149, 003	37 25
Garfield	116, 212	411, 712	149, 405	541, 009	1, 102, 126	275 53
Island	106, 408	188, 139	102, 043	125, 921	416, 103	104 02
Jefferson	100, 894	349, 003	305, 384	219, 232	873, 619	218 40
King	330, 442	7, 627, 190	1, 160, 720	1, 521, 665	10, 147, 640	2, 536 91
Kittitas	26, 840	170, 073	105, 976	671, 691	947, 740	236 93
Kitsap	61, 831	159, 292	380, 980	532, 730	1, 073, 002	268 25
Klickitat .....	.....	195, 116	125, 754	770, 510	1, 184, 766	296 19
Lewis	320, 665	1, 013, 192	201, 845	299, 243	1, 514, 280	378 57
Lincoln .....	.....	412, 932	99, 749	589, 301	1, 001, 982	250 50
Mason	133, 684	417, 711	29, 550	99, 367	546, 628	136 65
Pacific	88, 360	186, 262	114, 525	292, 408	593, 195	148 19
Pierce	115, 484	2, 068, 961	595, 563	1, 275, 678	4, 385, 062	1, 096 14
San Juan	26, 746	44, 225	70, 386	105, 072	219, 683	54 92
Skagit	123, 168	515, 907	95, 842	291, 121	902, 870	225 53
Skamania .....	.....	32, 110	12, 485	47, 708	92, 303	22 98
Snohomish	141, 815	370, 160	80, 850	153, 352	604, 362	148 64
Spokane .....	.....	1, 240, 621	437, 114	1, 522, 385	3, 200, 120	800 03
Stevens	5, 434	40, 215	5, 750	202, 987	242, 102	57 89
Thurston	181, 207	1, 937, 033	470, 165	742, 038	3, 149, 236	787 31
Wahkiakum	30, 460	68, 134	87, 885	164, 641	320, 660	80 16
Walla Walla	305, 157	2, 695, 316	920, 279	1, 741, 200	5, 356, 795	1, 339 19
Whatcom	84, 904	37, 700	92, 202	195, 925	608, 827	152 20
Whitman	420, 470	1, 149, 145	359, 352	1, 965, 187	3, 473, 684	868 42
Yakima .....	.....	676, 959	90, 090	545, 478	2, 314, 318	328 57
Total.....	3, 457, 952	25, 520, 943	7, 142, 674	17, 575, 401	50, 508, 484	12, 618 39

Statement showing the number of acres of land assessed, &c.—Continued.

Counties.	Territorial tax levy.	County tax levy.	School tax levy.	Poll and road poll tax levy.	Special tax levy.	Road and bridge tax.	Total tax levy.
Adams	\$438 49	\$1,227 67	\$350 82	\$310	\$1,754 44	\$526 16	\$4,746 70
Asotin	1,012 27	3,239 26	2,024 54	2,068		1,214 73	9,660 02
Chehalis	2,536 88	8,118 01	3,044 26	734	1,014 75	4,059 00	19,810 58
Clallam	550 70	1,762 24	881 12	582		660 84	4,492 17
Clarke	4,135 75	11,580 10	6,617 20	6,480	4,310 75	3,308 60	36,845 97
Columbia	7,236 42	17,367 42	11,578 28			5,789 14	42,694 90
Cowlitz	1,783 91	4,281 39	3,567 82	2,530	178 39	1,427 13	13,768 64
Douglas							
Franklin	372 50	1,192 02	596 01	208			2,703 78
Garfield	2,755 31	8,809 26	4,949 31	3,646	580 50	298 00	23,202 95
Island	1,040 26	3,120 77	1,248 31	420		2,207 02	6,765 55
Jefferson	2,184 04	6,552 14	2,184 04	1,035	4,989 54	832 20	18,629 14
King	25,369 10	65,959 66	35,516 74		5,073 82	1,466 00	130,612 59
Kittitas	2,369 35	7,581 92	2,843 22	1,156	947 74	2,156 32	14,926 99
Kitsap	2,682 50	6,438 01	4,292 01			947 74	15,290 29
Klickitat	2,961 91	9,478 13	5,923 83	1,600		1,609 51	22,629 51
Lewis	3,785 70	10,599 96	9,085 68	4,950		2,369 53	37,885 53
Lincoln	2,504 95	8,015 85	5,009 91			9,085 68	16,779 13
Mason	1,366 57	4,099 71	3,279 76	166	1,093*25	1,001 98	11,098 56
Pacific	1,479 58	4,742 39	2,371 04	448	361 03	1,093 25	9,803 36
Pierce	10,961 39	30,694 85	21,925 29	4,892		253 12	73,956 75
San Juan	549 20	1,757 46	1,427 93			4,387 08	3,789 58
Skagit	2,257 03	5,417 08	4,514 55	840		1,805 82	15,060 00
Skamania	229 50	738 28	461 73			183 48	1,635 97
Snohomish	1,509 85	4,834 75	3,626 10	2,172	3,003 20	3,020 51	18,315 05
Spokane	8,000 30	19,200 72	12,800 48			4,800 18	45,601 71
Stevens	603 70	1,429 22	945 97	950		620 28	4,607 06
Thurston	7,873 09	15,746 18	7,873 09	3,170		6,298 47	41,748 14
Wahkiakum	801 65	1,923 96	1,923 96			641 32	4,371 05
Walla Walla	13,391 98	26,784 97	21,427 18		5,356 79	5,356 79	73,676 90
Whitcom	1,522 07	4,870 61	3,652 96	920		1,217 65	12,335 49
Whitman	6,684 21	20,842 10	15,631 58	4,074		6,947 37	57,047 68
Yakima	3,285 79	9,200 22	4,600 11	2,906		1,971 47	22,292 06
Total	126,235 95	327,606 31	206,174 83	48,307	28,644 20	77,056 87	823,783 80

Statement showing the number of acres of land assessed, the total amounts and assessed value of all property returned by the several counties, and the taxes levied thereon, in kind and totals, for the year 1885.

Counties.	Lands assessed. Acres.	Real estate.	Value of improve- ments to real estate.	Personal property.	All taxable prop- erty assessed.	Penitentiary fund tax levy.
Adams	26,870	\$71,174	\$1,810	\$180,436	\$253,420	\$63 35
Asotin	51,364	172,769	56,464	245,773	575,006	118 75
Chehalis	258,343	906,909	65,651	201,735	1,174,795	293 69
Clallam	60,605	91,879	48,209	77,421	217,509	53 79
Clarke	166,183	940,047	443,370	615,373	1,998,790	499 69
Columbia	219,316	948,380	566,520	1,054,480	2,569,380	642 35
Cowlitz	142,021	351,341	143,120	325,116	819,577	204 89
Douglas	8,410	18,962	920	117,732	137,615	34 41
Franklin		3,530	3,135	583,884	590,549	147 25
Garfield	138,947	464,815	149,690	500,887	1,124,208	281 00
Island	107,046	172,805	98,365	124,191	395,361	98 84
Jefferson	90,875	360,595	287,886	255,682	904,163	226 04
King	183,375	4,519,325	901,595	1,427,060	6,847,980	1,711 99
Kittitas	26,070	175,561	96,730	696,811	969,102	242 27
Kitsap	72,439	186,050	389,540	523,120	1,098,710	274 68
Klickitat	372,078	208,877	155,514	840,776	1,205,172	301 20
Lewis	340,496	769,479	153,065	307,760	1,077,239	269 30
Lincoln		508,629	391,641	723,225	1,623,495	405 02
Mason	117,134	446,542	66,109	30,546	543,197	135 79
Pacific	84,038	197,250	104,874	376,633	678,758	169 69
Pierce	157,338	3,096,678	1,048,481	1,197,730	5,342,889	1,335 84
San Juan	23,930	56,448	92,414	91,387	240,249	60 06
Skagit		520,610	148,777	284,669	954,056	238 51
Skamania	15,950	42,184	10,948	78,152	153,354	38 33
Snohomish	148,734	401,962	116,802	160,982	679,746	166 50
Spokane	418,323	1,266,739	554,950	1,297,619	3,510,832	877 70
*Stevens	7,572	67,019	15,185	292,062	374,266	93 57
Thurston	187,146	1,008,111	374,929	691,656	2,075,496	518 87
Wahkiakum	53,582	100,023	93,465	123,758	317,246	78 97
Walla Walla	170,052	3,604,289		2,190,438	5,794,727	1,448 68
Whatcom	106,327	458,687	132,246	168,988	759,920	379 96
Whitman		1,189,639	494,652	1,815,623	3,499,914	874 97
Yakima		677,936	110,660	1,289,110	2,077,706	519 42
Total	3,754,564	24,006,044	7,318,722	18,890,815	50,484,437	12,805 47

Statement showing the number of acres of land assessed, &c.—Continued.

Counties.	Territorial tax levy.	County tax levy.	School tax levy.	Poll and road poll tax levy.	Special tax levy.	Road and bridge tax.	Total tax levy.
Adams	\$633 55	\$1,420 52	\$710 26	.....	.....	\$63 35	\$2,891 03
Asotin	1,187 52	5,800 00	3,850 00	.....	.....	1,900 00	.....
Chehalis	2,936 98	9,398 36	4,699 18	\$22 32	.....	5,873 98	25,216 97
Clallam	543 66	1,739 75	869 79	840 00	\$1,174 79	652 21	4,651 20
Clarke	4,996 98	9,993 95	11,992 74	792 00	.....	3,998 58	38,039 94
Columbia	6,423 45	20,568 00	12,855 00	6,558 00	4,500 00	5,142 00	48,200 63
Cowlitz	2,048 94	5,737 03	4,097 88	1,504 00	1,061 38	1,639 15	17,544 46
Douglas	344 04	1,100 93	825 70	2,997 00	819 57	275 24	3,268 40
Franklin	1,476 61	4,721 67	1,180 33	688 08	.....	294 95	8,082 21
Garfield	2,810 00	8,993 00	5,058 00	262 00	.....	1,124 00	18,268 00
Island	988 40	3,162 88	1,581 44	.....	.....	988 40	6,819 96
Jefferson	2,260 40	6,781 22	2,712 48	2,200 00	1,522 88	1,766 98	17,529 40
King	17,119 95	.....	.....	.....	.....	.....	.....
Kittitas	2,422 75	7,752 81	5,814 61	4,332 00	969 10	969 10	22,402 64
Kitsap	2,746 78	6,592 26	4,394 84	.....	.....	1,648 02	15,656 62
Klickitat	3,012 93	9,641 37	7,231 03	1,920 00	.....	1,205 17	23,311 80
Lewis	2,693 10	7,540 68	6,463 44	6,256 00	2,154 47	4,368 95	32,813 94
Lincoln	4,050 18	11,340 50	6,480 29	.....	.....	3,645 16	25,921 15
Mason	1,357 99	4,073 97	3,259 17	.....	.....	1,086 39	9,913 31
Pacific	1,696 89	4,751 30	2,715 03	.....	678 75	1,696 89	11,708 55
Pierce	18,358 47	32,057 76	32,057 76	7,874 00	.....	5,345 55	92,029 38
San Juan	600 62	1,922 00	1,681 74	.....	.....	.....	4,263 48
Skagit	2,385 14	6,678 39	4,770 28	2,862 17	.....	1,908 11	18,842 60
Skamania	383 38	.....	.....	.....	.....	.....	.....
Snohomish	1,697 01	5,437 71	4,078 25	2,586 00	706 66	4,077 91	18,750 04
Spokane	3,777 10	21,065 05	14,043 37	.....	.....	15,798 79	60,562 02
*Stevens	935 66	.....	.....	.....	.....	.....	.....
Thurston	5,188 74	16,603 97	10,377 48	2,918 00	.....	2,954 34	38,561 40
Wahkiakum	792 75	2,220 50	1,903 26	1,548 00	.....	634 15	7,177 63
Walla Walla	14,486 81	28,973 63	11,589 45	2,000 00	5,794 72	5,794 72	70,088 01
Whatcom	1,899 80	5,319 44	4,559 52	3,799 60	.....	1,519 84	17,478 16
Whitman	8,749 78	20,999 48	20,999 48	4,804 00	.....	6,999 83	63,426 66
Yakima	5,194 27	14,543 94	7,271 07	.....	.....	3,116 56	30,646 16
Total	126,200 63	284,931 47	199,132 77	58,972 75	19,382 32	86,322 72	724,065 75

* Not reported.

Statement showing comparative aggregate property valuations and tax levies (increase and decrease) in several counties as reported for the years 1884 and 1885.

County.	Total value of taxable property for 1884.	Total value of taxable property for 1885.	Increase.	Decrease.
Adams	\$175, 444	\$253, 420	\$77, 976	.....
Asotin	404, 908	475, 006	70, 098	.....
Chehalis	1, 014, 751	1, 174, 795	160, 044	.....
Clallam	230, 840	217, 509	.....	\$13, 331
Clarke	1, 654, 300	1, 998, 790	344, 490	.....
Columbia	2, 854, 570	2, 569, 380	.....	325, 190
Cowlitz	713, 565	819, 577	106, 012	.....
Douglas .....	.....	137, 615	137, 615	.....
Franklin	149, 003	590, 549	441, 546	.....
Garfield	1, 102, 126	1, 124, 208	22, 082	.....
Island	416, 103	393, 361	.....	20, 742
Jefferson	873, 619	904, 163	30, 544	.....
King	10, 147, 640	6, 847, 980	.....	3, 299, 660
Kittitas	947, 740	961, 102	21, 362	.....
Kitsap	1, 073, 002	1, 098, 710	25, 708	.....
Klickitat	1, 184, 766	1, 205, 172	20, 406	.....
Lewis	1, 514, 280	1, 077, 239	.....	437 031
Lincoln	1, 001, 982	1, 623, 495	621, 513	.....
Mason	546, 628	543, 197	.....	3, 431
Pacific	593, 195	678, 758	85, 563	.....
Pierce	4, 385, 062	5, 342, 889	957, 827	.....
San Juan	219, 683	240, 249	20, 566	.....
Skagit	902, 870	954, 056	51, 186	.....
Skamania	92, 303	153, 354	61, 051	.....
Snohomish	604, 362	679, 746	75, 384	.....
Spokane	3, 200, 120	3, 510, 842	310, 722	.....
Stevens	242, 102	374, 266	132, 164	.....
Thurston	3, 149, 236	2, 075, 496	.....	1, 073, 740
Wahkiakum	320, 660	317, 246	.....	3, 414
Walla Walla	5, 356, 795	5, 794, 727	437, 932	.....
Whatcom	608, 827	759, 920	151, 093	.....
Whitman	3, 473, 684	3, 499, 314	26, 230	.....
Yakima	1, 314, 318	2, 077, 706	763, 388	.....
Total	50, 508, 484	50, 484, 437	5, 152, 502	5, 176, 549
Decrease .....	.....	.....	.....	24, 047

GEOGRAPHY.

For the benefit of the intending immigrant and tourist, I venture to reproduce the brief geographical sketch contained in my last report:

Washington Territory is bounded on the north by British Columbia, on the east by Idaho, on the south by Oregon, and on the west by the Pacific Ocean; or, according to the notes from the surveyor-general's office, as follows: Beginning at the mouth of the Columbia River near the one hundred and twenty-fourth degree west longitude; thence up the middle channel of the Columbia to the intersection of the forty-sixth degree of north latitude; thence along said forty-sixth parallel to the middle channel of the Snake River; thence down said river to the mouth of the Clearwater River; thence north along the one hundred and seventeenth degree west longitude to the forty-ninth degree of north latitude; thence west along the forty-ninth parallel to the main channel of Canal de Haro, west of one hundred and twenty-third degree west longitude; thence southerly and easterly along the middle channel of Canal de Haro and the Straits of Juan de Fuca to the Pacific Ocean; thence along the eastern shore of the Pacific to the place of beginning; thus comprising an area of 69,994 square miles, of which 3,114 are water, leaving 66,880 square miles of land surface; of which it is estimated that about 20,000,000 acres are in timber-lands, 5,000,000 acres rich alluvial bottom-lands, and 10,000,000 acres are prairies and plains. The Cascade Range of mountains extends across the entire Territory, north to south, dividing the Territory into two sections (of which the easternmost is much the larger), and renders direct communication between the two sections in the middle and northern portions of the Territory impracticable, except during the summer season, when

the Snoqualmie and other passes are frequently traveled by herdsmen driving their cattle to the Sound. Ordinary communication is carried on by way of the Columbia River, and the railway in Oregon, which follows its southern bank. This difficulty of communication will be overcome as soon as the Cascade branch of the Northern Pacific Railroad is completed.

The fertile cereal-producing prairie lands and plains are situated in the eastern part, and nearly all the rich, alluvial bottom-lands are in the western part of the Territory.

The scenery of the Cascade Range is indescribably grand, affording views of such colossal peaks as Mount Baker, Mount Rainier (Indian, Takhoma), Mount Saint Helen's, and Mount Adams. Another beautiful range of mountains of lesser height, called the Olympic, lies along the coast between Puget Sound and the Pacific, affording a delightful prospect from the Sound and its vicinity.

The picturesque attractions of this country, with its glacier-covered mountains, its waterfalls, its majestic winding rivers, with their precipitous bluffs, its mighty expanse of inland island-dotted sea, its deep, broad, forest-bordered lakes, certainly furnish a new and interesting field for the tourist and the artist.

The great Columbia River, rising in the vast water-shed just north of the eastern part of the Territory, receives the copious waters of Clarke's Fork, flowing fresh from the Rockies through Lake Pend d'Oreille, then the Okanogan and other considerable streams, making its great bend to the westward, and thence flowing southeasterly, is joined by its great affluents, the Yakima and Snake Rivers, thus traversing the entire eastern section referred to; then flows along the southern border of the Territory, receiving the Lewis and Cowlitz Rivers west of the Cascade Range, and empties into the Pacific Ocean. It affords great facilities for commercial traffic, and abounds in delicious fish.

Just north of the mouth of the Columbia River is Shoalwater Bay, which has a good entrance from the ocean and is full of shoals and flats. The latter are covered with oysters, thousands of baskets of which are annually shipped to various cities of the Pacific coast. Herring, codfish, halibut, and sturgeon also there abound.

Twenty-five miles farther north is Gray's Harbor, having an excellent entrance from the ocean, bordered with extensive and valuable forests of fir and cedar, receiving the Chehalis River from the east and the Huntulup, Wishkah, and Hoquiam Rivers from the north, which drain great fertile valleys.

It is desirable that improvements be made by the General Government in Gray's Harbor, so as to allow the easy and safe passage of vessels of heavy draught from the Pacific Ocean to the mouths of the Wishkah and Chehalis Rivers.

Large mills have been built and new industries are springing into existence on these waters, that can be largely benefited at a comparatively small expense, and the people in this vicinity have lately prepared a petition to Congress soliciting these improvements.

PUGET SOUND.

Puget Sound is a great deep inland sea, extending nearly 200 miles from the ocean, having a surface of about 2,000 square miles, and a shore line of about 1,594 miles, indented with numerous bays, harbors, and inlets, each with its peculiar name, and contains numerous islands inhabited by farmers, lumbermen, herdsmen, and those engaged in quarrying lime and building-stone.

Admiral Charles Wilkes has described this pride of Washington Territory as follows:

Nothing can surpass the beauty of these waters and their safety. Not a shoal exists within the Straits of Juan de Fuca, Admiralty Bay, or Hood's Canal that can in any way interrupt their navigation by a seventy-four gun ship. I venture nothing in saying that there is no country in the world that possesses waters equal to these; they cover an area of about 2,000 square miles; the shores of all its inlets and bays are remarkably bold, so much so that a ship's side would strike the shore before her keel would touch the ground.

The country by which these waters are surrounded is remarkably salubrious, and affords every advantage for the accommodation of a vast commercial and military marine, with convenience for docks, and a great many sites for towns and cities, at all times well supplied with water, and capable of being well provided with everything by the surrounding country, which is well adapted for agriculture.

The Straits of Juan de Fuca are 95 miles in length and have an average width of 11 miles. At the entrance (8 miles in width) no danger exists, and it may be safely navigated throughout.

No part of the world affords finer inlands, sounds, or a greater number of harbors than are found within the Straits of Juan de Fuca, capable of receiving the largest class of vessels and without a danger in them that is not visible. From the rise and fall of the tide (18 feet), every facility is afforded for the erection of works for a great maritime nation.

The country also affords as many sites for water power as any other.

On this sound are already situated thriving towns and cities, bidding for the commerce of the world.

On the eastern part of the sound, near the city of Seattle, are situated two important fresh-water lakes of great depth and beauty, and bordered by great forests and rich deposits of coal. Lake Union, the smaller of these, having an area of 6 square miles, 6 miles shore line, and an average depth of 75 feet, is $1\frac{1}{4}$ miles distant from the sound, and is connected with it by a small stream entering into Salmon Bay. The eastern shore of Lake Union is separated from Lake Washington by a low isthmus 1,600 feet wide. Lake Washington has an area of 60 square miles, 75 miles of shore line, and an average depth of 200 feet, with numerous landlocked harbors. This lake is connected by a slough, navigable for small steamers, with Samamish Lake (9 miles long), and drains a country rich in natural resources.

During the year covered by this report a company has been formed, and the work fairly commenced, to construct a ship-canal connecting Lake Washington by way of Lake Union with Puget Sound. If this ship-canal can be completed it will, among other advantages, afford the finest known facilities for building and repairing sea-going ships of the greatest capacity in deep accessible fresh water, where the teredo can do no damage, and will enable the United States Government to establish a great navy-yard on the Pacific coast under the most favorable circumstances. I believe the Government could well afford to aid the completion of this canal by suitable legislation, such as is called for by those engaged in the work; and I understand that no appropriation is asked for except a donation of lands to be reclaimed on the borders of Lake Washington by draining the waters thereof to a lower level through the proposed canal. This can be easily accomplished, inasmuch as the surface of Lake Washington is 11 feet higher than that of Lake Union, and that of Lake Union is 7 feet higher than the waters of the sound at high tide. The Government could also properly reserve a suitable body of timber for naval purposes.

The most important rivers entering into Puget Sound are as follows: the Des Chutes, emptying into Budd's Inlet at Olympia, notable for its fall and its water power; the Puyallup, flowing through a rich valley, mainly devoted to hop culture, into Commencement Bay near Tacoma; the navigable Duwamish, with its tributaries, the White, Black, and Cedar Rivers, fertilizing rich bottom-lands, which enters Elliot Bay near Seattle; the navigable Snohomish, with its tributary, the Snoqualmie, which makes a sublime perpendicular leap of 270 feet, celebrated as the Snoqualmie Falls; the Skagit, also navigable and fertile in its surroundings; the Swinamish, entering into Bellingham Bay; the Lummi, which has the Nootsack for its tributary, and also enters into Bellingham Bay. Near the outlet of the latter stream are the reclaimed tide lands, remarkable for their immense crops of wheat, oats, and barley; the Skokomish is the largest stream, emptying into that arm of Puget Sound called Hood's Canal. All these streams are serviceable for the shipment of logs to tide-water, except in instances where the

débris from the forest has lodged and formed snags interrupting navigation. For this reason it is important that the Government should make ample provision by appropriation for clearing out these streams. The immense wealth of this country in its timber, calls for the utmost consideration on the part of the Government in favoring shipments thereof to tide-water.

THE COLUMBIA RIVER.

The Columbia River, the great river of the Northwest, belongs peculiarly to Washington Territory. From its mouth upward for a distance of 320 miles it forms the southern boundary. From near this point for a distance of 137 miles directly to the eastward and 31 miles to the northward, its principal tributary, the Snake, flows through the Territory, a great navigable river. From the same point to the northward the Columbia makes an extensive horseshoe bend into the northern confines of the Territory, and then passes off into British Columbia, a river of mighty proportions the whole distance. Its navigability for boats of considerable draught is a perfectly feasible matter for a distance of more than 1,000 miles from its mouth. Seven hundred and fifty-two miles of this portion of the river lies within or upon the boundaries of Washington Territory. Add to this the 168 navigable miles of the Snake River, and we have available for the solution of the cheap transportation problem of the Territory a length of 920 miles of navigable rivers, whose water discharge is so great as to make it an easy matter to secure navigation all the year round, except during a few weeks of ice during the winter. Excepting on the short flat section near the sea, the waters are so pure and free from sediment as to make navigation improvements a matter of all time. Once done, done forever.

A glance at the map will show that the whole Territory is thus placed within easy reach of navigable water-ways.

The problem of cheap transportation lies at the very foundation of the prosperity of a people. It is, in fact, the most powerful factor of civilization. It has never been secured with precision except through the agency of free water-ways. Whether used or not, their existence has the nature of a guarantee. These considerations have made it the policy of governments to interpose and furnish their peoples with them, at whatever cost. As a business proposition for the profit of individuals, money spent in improving a water-way to secure a route of free transportation thereon would be absurd. But for a government the affair is very different. Any direct returns upon its investment would be a bagatelle compared with the indirect. These latter are so great that the former can well be ignored, and no man has yet sounded the depth of expense to which a government may go in the development of cheap transportation and still find it a paying investment.

In its march to the sea the Columbia River encounters the lofty upheaval of the Cascade Mountains, and in the most marvelous manner effects the passage upon a line at right angles to their axis. Carving a mighty gash through the beds of lava, basalt, and porphyry, it has developed extensive obstructions to navigation at the Dalles and the Cascades. But a horizontal line across a range of mountains that cuts off a great country from the sea is of necessity a line of strategic importance to commerce, and hence the necessity that the nation should not delay in making this line a water transportation route, clear and free to all.

From its mouth for a distance of 100 miles straight away inland the

Columbia furnishes a water-way that allows the ships of the world to get that much nearer to the products of the country. A few inland bars are met with on the way, which can be removed at a very small cost; but at its mouth navigation is obstructed by the most remarkable of all ocean bars. Here, in a region comparatively free from violent storms, vessels encounter colossal seas breaking in 80 feet of water. Here the mighty river has flung its bar into the jaws of the sea for a distance of 7 miles, forming the last link in the chain which binds its waters.

The various improvements now in hand or proposed by the General Government are substantially as follows:

MOUTH OF THE COLUMBIA RIVER.

A jetty of brush and stone extending from Fort Stevens on the south side, along the the crest of Clatsop Spit and westward toward the bar, a distance of 4 miles. Its estimated cost is \$5,500,000.

THE LOWER COLUMBIA.

From the mouth to Portland, including a short reach on the Willamette River, the river is obstructed by a few bars of sand. The projected improvement of them consists in practically reducing the width of the river at these points with structures of wood, brush, and stone.

The estimated cost of this work is \$354,000.

THE CASCADES CANAL.

One hundred and forty-six miles above the mouth a great convulsion has flung a portion of the mountain on the north side into the river, extensively constricting its width, and creating the Cascades of the Columbia, which extend over a distance of about $4\frac{1}{2}$ miles. The project here is to build a canal with locks, the canal to be 3,000 feet in length, to flank the upper Cascades and to blast the remaining portion clear of obstructions. This latter portion of the work is completed with the most gratifying success, and about \$1,250,000 more is required to complete the work.

THE DALLES OF THE COLUMBIA.

One hundred and ninety-five miles above the river's mouth occurs the most remarkable known river obstruction. The river, in carving a channel across a range of mountains, has finally reached a bed of hard black basalt, through which it has only succeeded in cutting a narrow gash about 250 feet in width. Its narrowest place is 128 feet wide; through this narrow cut, the river, polarized and set upon edge, is obliged to flow.

The velocities created by this constriction are tremendous, and the damming of the waters causes a difference between low and high water of 87 feet. Over a considerable portion of this enormous height the river fluctuates annually.

A few miles above, at Tumwater, the river has a fall of 20 feet. It is proposed to overcome these obstructions by boat-railways, at a cost of \$1,300,000, but no project has yet been adopted.

THE UPPER COLUMBIA.

Above the Dalles on the Columbia the nature of all the obstructions has not been accurately defined, but in a general way they consist of rock obstructions in rapids.

In view of the foregoing considerations I would most respectfully urge upon Congress the importance of making large appropriations for the speedy improvement of the Columbia River, with the view of eventually removing obstructions, so that it may be utilized for commerce, by the passage of vessels and boats from its mouth to its remotest navigable waters.

RAILROADS.

The construction of railroads has steadily progressed.

The Oregon Railway and Navigation Company operates 259.5 miles of railroad within the Territory, as follows: Main line, standard gauge, 227.7 miles; sidings, 23.4 miles; narrow-gauge line, 6 miles; narrow-gauge sidings, 2.4 miles. It is extending its branches into the wheat regions of the eastern part of the Territory; has completed its branch from Colfax to Moscow, and is now building from Starbuck to Pomeroy (Pataha branch).

Mr. C. H. Prescott, manager of the Oregon Railway and Navigation Company, in answer to inquiry, informs me that his company expects to bring out from the southeastern part of Washington Territory alone, by its lines of transportation the present year, 250,000 tons of wheat, flour, and barley.

This road, by its connection east through the Oregon Short Line and Union Pacific Railroads, is doing much for the development of the Territory.

The Northern Pacific Railroad Company now operates 455.9 miles of railroad within the Territory. During the year it completed 62 miles—from a point 25 miles west of Pasco Junction, on its main line, to North Yakima—which were accepted by the President of the United States.

Grading and bridging of the 37 additional miles, between North Yakima and Ellensburg, in Kittitas County, is finished, and it is expected that this part of the line will be ready for operation in the latter part of January, 1886. On the west side of the Cascade Mountains the company put under construction 25 miles of very difficult road from South Prairie to a point on Green River, which will be completed and ready for inspection by the Government by November 1, 1885. By the beginning of the next calendar year, then, there will remain unfinished of the Cascade branch of the Northern Pacific Railroad only 75 miles of road. And the people of the Territory begin to see near at hand the realization of their long-cherished hope of direct railroad connection between the western and eastern parts of the Territory.

The influence of the opening of the Northern Pacific Railroad in the extension of the commerce of the Territory is making itself felt to a constantly growing extent. Many of the products of the Territory for which there was no outlet before the completion of the road find a ready market in the Atlantic States and the Western States and Territories. There were shipped from the Territory over that road to eastern points, according to the reports of its officers, 26,640 head of cattle, 22,000 head of sheep, and 3,000 head of horses. The prices obtained for this stock have been satisfactory, and serve as a stimulus to increased production and the introduction of better grades of animals. The very low ruling price for wheat, one of the staple products of the Territory, has borne

hard upon the agricultural classes. In the regions remote from railroad communication, and even in some where such communication is at hand, the cost of production exceeded the price realized. But even there the people have not become discouraged; and the present harvest, which promises to be bountiful beyond precedent in any country, well justifies their faith.

The Northern Pacific has established a wheat rate of 40 cents per hundred from all points along its line in Washington Territory to Duluth, on Lake Superior, which rate enabled such of our people as could reach that line to dispose of their wheat at a profit. There were shipped from the Territory to Duluth and other eastern points, 4,161 tons of wheat and 1,600 tons of other grain. The promise of the company to keep in force this low rate has largely stimulated production, and the shipment of grain overland to the East is expected to assume large proportions after the present crop shall have been harvested. Of other products there were shipped to eastern points 1,783 tons of flour, 1,700 tons of hops, 67 tons of green fruit, 10,019 tons of lumber, and 500 tons of wool. The shipment of coal from the coal-fields drained by the Northern Pacific Railroad to tide water, for home consumption, and for shipment to San Francisco and other Pacific coast points, amounted to nearly 200,000 tons, for the past year.

Immigration, while perhaps not equal to that of the preceding year, has continued in a steady stream. The Government entries within the limits of the grant to the Northern Pacific Railroad Company number 2,401. The Northern Pacific Railroad Company, according to published official reports, sold in Washington Territory 75,574.38 acres to 756 purchasers. These sales were made, with hardly any exception, to actual settlers, who generally buy the company's lands on long terms of payment.

The Columbia and Puget Sound Railroad Company (narrow gauge), a corporation auxiliary to the Oregon Improvement Company, now has in operation 44.6 miles of main line and 5.25 miles of sidings; the main line laid with steel rails; road-bed and superstructure constructed for standard gauge. The line from Seattle to Franklin, 33.6 miles, was completed January, 1885. The branch from Renton to the New Castle mines, 8 miles, has been operated for several years. This road hauled over 210,000 tons of freight during last year, and now opens the most valuable coal-field yet discovered in the Territory.

The Puget Sound Shore Railroad Company operates a standard-gauge road from Seattle to Stuck Junction, 23.5 miles, in connection with the Northern Pacific Railroad, from Stuck Junction to Tacoma. This road opened for business October 25, 1885, and affords a direct railway connection from Portland to Seattle through Tacoma.

The Olympia and Chehalis Valley Railroad, narrow gauge, about 15 miles in length, connects Olympia on Puget Sound with the Northern Pacific Railroad at Tenino.

Counting the newly constructed road and that nearly completed, there are now in all 866 miles of railroad in the Territory, of which 804 miles are now operated.

COMMERCE.

No adequate showing can be made of the entire commerce of the Territory, for the reason that the surplus grain, wool, and salmon of the eastern and southern portion of the Territory have hitherto been principally shipped by the way of the Oregon custom-house at Portland and Astoria, and no separate account has been taken of our produc-

tions, which, for the purpose of a full showing, would belong to the credit of this Territory. By careful computation it is ascertained that 250,000 tons of wheat, flour, and barley, the surplus product of the present year in the southeastern portion of the Territory, are being shipped to Portland, Ore., thence to be exported.

Thousands of cattle are being driven or shipped by rail direct to the East without any custom-house record being taken of their numbers and value. Shipments of grain for this season have been made by rail in the same direction, so that the aggregate exports of the Territory cannot be accurately computed.

The head office of the collection district for Puget Sound is at Port Townsend, in Jefferson County, and there vessels are constantly arriving and departing for ports in British Columbia, Mexico, Hawaiian Islands, Australia, Fiji Islands, China, Japan, South America, England, Ireland, Central America, and Peru, besides for all important points in California and Alaska; thus rendering it one of the most important seaports in the United States.

There are 92 steam vessels, ranging in size from the 5-ton propeller to the steamer of 1,100 tons, now registered at the office of the collection district of Puget Sound, all of which are employed in the domestic freight and passenger traffic of Puget Sound alone. There were 169 vessels, aggregating 47,657 tons, documented at Port Townsend for the fiscal year ending June 30, 1885. Of this number, 89 were sailing vessels and 80 were steam vessels.

During the fiscal year 2,130 vessels, aggregating 930,374 tons, were entered and cleared, of which 178 were coastwise and 1,952 were foreign vessels.

Add one-third for estimated tonnage of licensed vessels running to San Francisco and other coast ports, and we have the aggregate number of 2,840 vessels, with a tonnage of 1,240,499 tons. The average monthly entrances and clearances for the year 1885 amounted to 227, of which 177 were foreign and 50 were coastwise. The proportion of American to foreign bottoms engaged in the foreign trade is 25 American to 1 foreign.

There were 14 new vessels built during the year ending June 30, 1885, of which 8 were steam vessels, amounting to 675.27 tons, and 6 were sail vessels amounting to 967.02 tons; making a total of 1,642.29 tons.

Total collections for fiscal year, \$47,575.83.

The falling off in collections for the fiscal year 1885 was caused by the reduction in tonnage dues on vessels entering from foreign ports; the reduction in fees on steamboats inspected; and the abolishing of hospital dues and the general reduction of fees; all of which took effect since July 1, 1884.

As compared with the previous year, although the volume of business was much greater, the aggregate collections were less; an estimate on the business of the preceding year showing a loss of \$25,000 from these sources.

As it appears from the data afforded me by the office of this collection district, the total value of exports for foreign trade for the fiscal year 1885 is \$3,184,908, and the total value of exports, domestic and coastwise, for the same period is \$7,000,000, making a total of \$10,184,908.

Vessels entered and cleared during fiscal year ending June 30, 1885.

Months.	Entered.		Cleared.	
1884.	No.	Tons.	No.	Tons.
July.....	84	39,670	93	49,302
August.....	108	58,837	105	46,694
September.....	94	32,740	97	36,319
October.....	103	46,292	97	36,214
November.....	86	33,146	84	27,100
December.....	81	33,815	72	24,664
1885.				
January.....	77	34,356	82	35,186
February.....	65	32,331	67	27,910
March.....	68	25,511	73	29,402
April.....	93	41,117	92	40,488
May.....	103	41,378	102	44,188
June.....	103	58,907	101	54,766
Total.....	1,065	478,140	1,065	452,234

RECAPITULATION.

ENTRANCES.

Vessels.	Entered at—	In cargo.		In ballast.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American:							
From foreign.....	Fort Colville.....			13	3,497	13	3,497
Do.....	Roche Harbor.....	20	2,200	185	15,721	205	17,921
Do.....	Port Townsend.....	193	92,973	517	240,247	710	333,220
From coastwise.....	do.....	55	54,315	37	34,974	92	89,289
Foreign:							
From foreign.....	do.....	2	1,245	33	25,391	35	26,636
From coastwise.....	do.....	1	568	9	7,009	10	7,577
Total for district.....		271	151,301	794	326,839	1,065	478,140

CLEARANCES.

Vessels.	Cleared from—	In cargo.		In ballast.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American:							
To foreign.....	Fort Colville.....	12	3,228			12	3,228
Do.....	Roche Harbor.....	137	5,546	29	4,745	166	10,291
Do.....	Port Townsend.....	523	235,280	245	116,399	768	351,679
To coastwise.....	do.....	75	55,819	1	30	76	55,849
Foreign:							
To foreign.....	do.....	39	30,522	4	665	43	31,187
Total from district.....		786	330,395	279	121,839	1,065	452,234

Exports in foreign vessels for the fiscal year 1885.

Months.	Lumber.	Laths.	Pickets.	Spars.	Salmon.	Total value.
1884.	Feet.	No.	No.	No.	Value.	
July.....	2,820,000	223,000			\$475 00	\$37,116 00
August.....						
September.....	2,537,000				1,400 00	29,756 00
October.....	1,000,000	81,000	26,000	75		22,421 00
November.....	1,710,000	577,000				23,436 00
December.....	935,000	10,000		4	1,200 00	11,338 00
1885.						
January.....	3,058,000	749,000	31,000			37,161 00
February.....	1,035,000	50,000				10,493 00
March.....	1,981,000					23,685 00
April.....	1,728,000	272,000				19,079 00
May.....	2,027,000	300,000	45,000			27,009 00
June.....	2,856,000	79,000	124,000		3,700 00	35,061 00
Total.....	22,287,000	2,341,000	226,000	79	6,775 00	276,555 00

Total value of exports for foreign trade for fiscal year 1885..... \$3,184,908
 Total value of exports, domestic and coastwise, for fiscal year 1885..... 7,000,000

The following is a complete list of the steamers belonging to the collection district of Puget Sound :

Name.	Where built.	When built.	Tonnage.
Addie.....	Seattle.....	1874	81.02
Blakely.....	Port Blakely.....	1872	175.01
Biz.....	Arcadia.....	1881	80.54
Colfax.....	Seabeck.....	1865	83.30
Cello.....	Seattle.....	1880	32.62
Cyrus Walker.....	San Francisco.....	1864	24.31
Daisy.....	Seattle.....	1880	97.81
Dispatch.....	Port Madison.....	1876	66.71
Edith R.....	Seattle.....	1883	57.84
Edna.....	do.....	1883	19.53
Eliza Anderson.....	Portland.....	1859	197.40
Favorite.....	do.....	1864	84.68
Favorite.....	Utsalady.....	1868	269.45
Gipsy.....	San Francisco.....	1868	215.33
Gazelle.....	Portland.....	1876	156.56
Glide.....	Seattle.....	1883	78.54
Gollah.....	New York.....	1849	234.86
Lottie.....	Seattle.....	1883	25.44
Lucy.....	do.....	1883	32.06
Libby, J. B.....	Utsalady.....	1863	163.19
Lilly.....	Seattle.....	1881	80.03
Messenger.....	Olympia.....	1876	121.95
Mastick.....	Port Discovery.....	1869	194.35
Montesano.....	Astoria.....	1882	87.01
Nellie.....	Seattle.....	1876	100.22
North Pacific.....	San Francisco.....	1871	488.72
Otter.....	Portland.....	1874	123.71
Phantom.....	Port Madison.....	1869	35.53
Rose.....	Sitka.....	1867	45.85
Politkofsky.....	do.....	1866	255.44
Ruby.....	Snohomish.....	1867	37.62
George E. Star.....	Seattle.....	1880	472.66
St. Patrick.....	Waterford.....	1879	21.25
Success.....	Utsalady.....	1868	13.14
Swan.....	Tacoma.....	1868	4.00
Tacoma.....	San Francisco.....	1876	239.51
Virginia.....	do.....		9.91
Yakima.....	Port Gamble.....	1874	173.54
Zephyr.....	Seattle.....	1871	161.54
Agusta.....	do.....	1881	19.54
Fannie.....	do.....	1875	4.40
Hornet.....	Port Blakely.....	1881	8.14
Jessie.....	Seattle.....	1881	11.93
Susy.....	do.....	1879	47.43
Hope.....	do.....	1882	76.56
Rip Van Winkle.....	Astoria.....	1881	36.56
James McNaught.....	Seattle.....	1882	94.70
Welcome.....	Portland.....	1874	326.56
Idaho.....	do.....	1881	278.15
City of Quincy.....	do.....	1879	145.40
Emma Hayward.....	do.....	1878	456.07
Evangel.....	Seattle.....	1882	149.00
Ellen.....	Coupeville.....	1881	17.87
Alki.....	Seattle.....	1882	45.22
Seattle.....	do.....	1882	6.56
Louise.....	San Francisco.....	1882	9.14
Baby Mine.....	Steilacoom.....	1882	4.00
Gora.....	San Francisco.....	1881	4.00
Evril.....	Portland.....	1880	4.00
Planter.....	Seattle.....	1883	32.06
Merwin.....	do.....	1883	166.04
Washington.....	Vancouver.....	1881	193.08
Louise.....	Seabeck.....	1883	129.77
Lone Fisherman.....	Seattle.....	1883	6.46
Willie.....	do.....	1883	55.94
Tillie.....	do.....	1883	16.76
Brick.....	do.....	1883	2.77
Port Susan.....	do.....	1883	14.42
Queen City.....	do.....	1883	33.66
Arrow.....	do.....	1883	9.25
Bay Center.....	Elma.....	1883	81.32
Bob Irving.....	Seattle.....	1883	125.50
Bee.....	Eagle Harbor.....	1883	6.98
W. F. Monroe.....	Seattle.....	1883	99.81
Gov. Newell.....	Portland.....	1883	134.43
Gen. Garfield.....	Rainier.....	1881	10.66
Favorite.....	Bay Center.....	1881	5.10

Name.	Where built.	When built.	Tonnage.
Argo.....	Astoria.....	1883	9.35
Hunter.....	San Francisco.....	1883	92.25
Colby.....	Seattle.....	1883	5.00
Pearl.....	.....do.....	1884	34.17
Olympian.....	Wilmington, Del.....	1883	1,083.20
Skookum.....	Big Skookum.....	1884	57.37
Rustler.....	Seattle.....	1884	51.82

List of steamers built during the fiscal year 1884-'85.

Activa.....	Tacoma.....	1884	6.77
Cascade.....	Seattle.....	1884	59.31
Tyce.....	Port Ludlow.....	1884	158.17
Edith.....	Sehome.....	1884	52.18
Squak.....	Lake Washington.....	1884	37.17
Kootenai.....	Little Dalles.....	1885	258.52
Iola.....	Big Skookum.....	1885	13.03
Estella.....	Tacoma.....	1885	11.94

MINERAL RESOURCES.

COAL-FIELDS AND COAL-MINING IN WASHINGTON TERRITORY.

Until more thorough explorations are made, coextensive with the Territory, it cannot with any degree of certainty be said that coal does not exist where as yet it has not been found.

So far, the important coal-fields have been found in Western Washington, and these chiefly in and near the Puget Sound basin.

Beginning with the earliest discovery, and the first workings, are the coal-mines of Bellingham Bay, near the north boundary of the Territory. These mines were profitably worked for many years, and until other coals of a better quality were found. Difficulties, too, in working made the cost of mining too great, and the work had to be abandoned. It is not at all probable that anything further will be done with the old openings at Sehome, but the field is not exhausted.

There are other points on Bellingham Bay where mining of coal may, in no distant future, be begun and carried on. Unless other veins than those now known to exist should be found, this particular field is not very extensive.

South of Olympia, in the valley of the Skookum Chuck and the Chehalis, is another field, taken together, which may yet prove to be of some extent in that direction. No very thorough explorations have yet been made, either to ascertain its quality or extent. All the working that has yet been done is quite limited, but there are indications of such a quality of coal in part of this field as will ere long lead to its development. Concerning this field, Mr. R. Wingate states as follows:

The coals found here are of the Lower Tertiary period, and one of the veins found is 13 feet in thickness, and another $7\frac{1}{2}$ feet thick. These veins lie at an angle of 5 degrees, have good roof and pavement, and can be easily and cheaply mined. From prospectings and openings made, it is safe to say there is a very large area of country in this vicinity overlaid with these coals, which have been practically tested, and are of a somewhat better quality than coals shipped from the New Castle mines near Seattle.

East of Seattle and of Lake Washington are what are known as the Seattle mines, which have been more thoroughly and extensively worked than any others. These are in operation to-day, are being successfully

worked, with prospect, under proper management, of long continuance. These veins run eastward into the Issaquia Valley, and probably still farther.

The Renton and Talbot coals, about 6 miles south of the Seattle mines, may be considered as a part of the Lake Washington coal-field. The Renton Company is working the Talbot coal-vein, from which they obtain an excellent article of lignite or brown coal. All the coals mentioned thus far belong to this class. They are properly to be termed lignitic. They are valuable both for steam and domestic purposes.

Next in importance to these are the Puyallup coal-fields, spreading in various directions along Carbon River up the South Fork of the Puyallup, on Flett Creek, and South Prairie Creek. The veins of coal seem to be quite numerous, differ widely in their character; most of them are bituminous; a few semi-bituminous, or between lignite and bituminous.

The coals of this region, where the veins are clean, are superior in quality to the coals previously mentioned. Most of these are coking coals, give out, generally, more heat, and contain a larger per cent. of carbon. They can be used not only for steam and domestic purposes, but for gas, for forge coal, and for coke. Some of these will be found valuable in the smelting of iron, if not in its natural state, in its conversion into coke, of which a superior article can be produced from some of these veins.

There are three distinct collieries in this region, one at Wilkeson, on Flett Creek, the second at Carbonado, on Carbon River, and the third on South Prairie Creek. At the latter place the vein is thinner than at the other places, but is more regular in its strike and cleaner than the generality of the Puyallup veins. Its present production is 200 tons per day.

There are quite a number of veins at and about Wilkeson, but the greater number are manifest on Carbon River. The production of the Carbon Hill mines has reached 1,000 tons per day, and may perhaps be considered the largest of the mines now worked, although the difference of output between this and the Seattle or New Castle mine is not very great. One drawback to much of this field is the broken nature of the country, which has dislocated the veins and places them at various angles, both in strike and pitch, in some instances the pitch being nearly vertical. But the coal is valuable, and methods will be adopted by which the most of these veins will be worked.

The latest-discovered and probably the most valuable coal field is that known as the Cedar or Green River. This lies to the east and south of Lake Washington, and is doubtless a continuance, in some measure at least, of the most easterly veins found on the Puyallup. The coals are of the same quality; bituminous; inostly clean. The face of the country, especially on Cedar River, is more level, the veins lie at less acute angles, and can for the most part be cheaply worked.

On Green River the country is more broken, and very similar to what is found around Wilkeson and Carbonado. This field is believed to be quite extensive, and there are in some portions of it thin anthracite veins of coal.

A few miles from Renton, on Cedar River, is the MacAllister vein or mine, on which work has recently been commenced, and it gives promise of being an excellent coal. It seems to be rather intermediate between lignite and bituminous in its quality, as it really is in its position.

Nor must we overlook the coal discoveries on the Skagit River, which, though not extensive as yet, still form a link in the chain that reaches from Bellingham Bay on the north to Chehalis Valley on the south,

separated in some degree from each other, so far as the surface gives any indication. Some of them seem to be separate and distinct basins, differing materially in strike and pitch. But when we reach the more eastern veins, lying in the foot-hills of the Cascade Range, there are evidences of continuity which may yet prove these to be a long line of rich bituminous veins, from the valley of the Chehalis, through the Skookum Chuck, crossing the valleys of the Puyallup, the Green, the Cedar, the Snoqualmie, and the Skagit, to near the northern boundary of the Territory.

Whilst there is much, *very much*, yet to be learned in regard to the mineral resources of this Territory, and as to the extent of its coal measures, there is nevertheless sufficient known at the present time to justify the claim which has been made that "Washington Territory is the Pennsylvania of the Pacific coast".

The following data have been carefully gleaned concerning the mines which have thus far been commercially operated:

NEW CASTLE.

Shipments for five years ending June 30, 1885.

	Tons.
1880	128, 853
1881	149, 602
1882	158, 340
1883	218, 742
1884	149, 048
Total	804, 585
Average per year	160, 917
Decrease in 1884 compared with 1883, 31.8 per cent.	

Owing to the dullness of the coal trade this year, and the inferior quality of the coal, work on the No. 1 seam has been stopped for the time being. The No. 2 and the No. 4 seams only are being worked, both of which are producing an excellent domestic coal.

A fire in the No. 2 seam having prevented the mining of coal from this seam on the east side of the mine, and a dividing rock having separated the seam on the west, which was 10 feet thick, making of it two seams of nearly 5 feet each in thickness, it was deemed best to sink the slope a lift deeper so as to secure a superior coal at less cost per ton. This is nearly accomplished, and the new range will be in operation by the 15th of December next. This new lift has been sunk about 450 feet, which will place its gangways 950 feet from the surface along the angle of the vein. This new lift, with proper care and good management, should last from four to five years, shipping 15,000 tons per month. When this lift is finished it is thought that several others of equal depth can be sunk, as the basin is likely to be very deep.

A heavy decrease will be noticed in the shipments, which is owing to the dullness of the coal trade and not to the incapacity of the mine.

RENTON.

This mine is located on sections 17, 19, and 20, township 23, range 5 east of Willamette meridian, 13 miles from Seattle, its shipping port, on the line of the Columbia and Puget Sound Railroad. One coal-bed is developed, whose thickness is from 7 feet to 9 feet, being of the same kind and quality of coal as that of New Castle, given in last year's report with an analysis. The dip of the measures is gentle, and the strike is irregular, owing to the presence of an anticlinal axis. At the date of this writing the mine is abandoned and under water through depressed

markets and excessive cost of pumping. The shipment for the past year to July 1 is 30,397 tons; 4,721 tons have been shipped since June. The mine has been in operation since 1874.

TALBOT.

The location of this mine is on section 19, township 23, range 5 east of Willamette meridian, adjoining the Renton mine, and opened on the same coal-bed. Operations began in 1875 and ended in 1879, when the mine was merged in the Renton-mine operations. The coal shipped during the life of the mine is estimated at 10,000 tons.

CEDAR MOUNTAIN.

This mine is located on sections 29 and 30, township 23, range 6 east of Willamette meridian, on the south bank of the Cedar River, and on the Cedar River Extension Railroad. Distance from Seattle, 18½ miles. The coal-bed, the only one developed, is 10 feet in thickness, and dips to the east 20 degrees. The coal is, in character, the same as the "Seattle lignite." Shipments began in July, 1884, and the tonnage for the year, to July 1, is 14,573.

BLACK DIAMOND.

This mine is in the Green River field on the Cedar River Railroad Extension, on sections 14 and 12, township 21, range 6 east of Willamette meridian, and 31 miles from Seattle. Three coal-beds are developed, ranging from 5 to 6 feet in thickness and dipping from 12 degrees to 30 degrees. The quality of the coal is about the same as that reported for the Franklin mine last year. The daily capacity of the mine is from 600 to 800 tons. Coal was first shipped in April of this year, and the tonnage to July 1 is 10,562. This is the first coal from this field marketed. It met with ready sale and considerable favor as a steam coal. As yet, it lacks coarseness to become a choice domestic coal.

FRANKLIN.

No coal was shipped from this mine last year. The first shipment was made in July, 1885, and the capacity to-day is about 100 tons. The product is becoming quite a favorite for steam and domestic use.

TACOMA.

This mine is located on sections 27 and 32, township 19, range 6 east of Willamette meridian, on the Northern Pacific Railroad, 32 miles from Tacoma. The mine was developed originally in or about 1876; abandoned after a short trial, and reopened in 1884. Shipments for the year, to July 1, 1885, 5,431 tons. The quality of the coal is the same as that reported for Vulcan mine last year, and the coal-beds are the same, but located on the opposite side of the anticlinal axis.

SOUTH PRAIRIE.

This mine is situated on section 16, township 19, range 6 east of Willamette meridian, 28 miles from Tacoma, on the Northern Pacific Railroad. Commenced operations in 1881. The coal-bed mined is bituminous in character, and its quality brings it a ready sale for gas, steam, and domestic purposes. The thickness of the bed is 4 feet, and the

angle of dip varies from 45 degrees to 80 degrees. The mine-opening is a water-level drift. The shipment for the year ending with June, 1885, is 34,313 tons.

CARBON HILL.

This mine is on sections 3, 4, and 9, township 18, range 6 east of Willamette meridian, 34.3 miles from Tacoma, its shipping port, on the Northern Pacific Railroad. The site of the mine is on Carbon River, in a cañon from 400 feet to 500 feet deep. The sides of the cañon are precipitous and extremely imposing. The view of the coal formation on the side of the cañon, with its many foldings or corrugations over a series of synclinal and anticlinal axes, is grand beyond description. The coal mined is chiefly taken from drifts above natural water drainage, at the level of the river, and elevated on an incline plane 800 feet long a vertical distance of nearly 500 feet. The principal coal-beds mined are three in number, $3\frac{1}{2}$, $4\frac{1}{2}$, and 10 to 12 feet in thickness. Several other veins have been "opened", and more or less developed. The coal is bituminous, soft and fine, yielding a low percentage of coarse, and is used chiefly for steam purposes in California by the Central Pacific Railroad Company. Operations were begun in 1880, and the daily capacity of the mine to-day is from 700 to 800 tons. The shipment for the last year, ending with June, 1885, is 135,926 tons.

BELLINGHAM BAY.

This is the first mine of note developed in the Territory. It is situated in Whatcom County, on Bellingham Bay, in township 38, range 3, east of Willamette meridian. The coal-bed is 14 feet in thickness, yielding some 10 feet of clean coal, and from a test made the quality compares favorably with the "Seattle lignite". The formation dips from 8 degrees to 36 degrees. The main mine-opening is a slope 300 yards long, dipping 36 degrees. One arm of the mine extends 150 yards under the bay. Shipments from the mine began in 1860 and continued into 1878. The reported shipment for the eighteen years is 233,043 tons. Adding to this the home consumption, the total mine output would be in the vicinity of a quarter of a million tons. The mine is now full of water. While in operation the mine is reported to have caused considerable annoyance through the coal igniting spontaneously.

The above covers all the coal mining operations of note within the Territory, excepting the Vulcan mine, reported in 1884, and a small operation or test mine opened on Straits de Fuca, near Clallam Bay, in Clallam County, in 1867, from which a cargo of 500 tons was shipped.

The total shipment for the Territory for the year ending June 30, 1885, is 380,250 tons. Adding the home consumption to this, the total mine output will be about 410,000 tons.

From the data at hand it is estimated that the total output of coal in the Territory to January 1, 1885, covering a period of twenty-four years, is in the neighborhood of 2,200,000 tons, a trifle more than 2 per cent. of the United States coal product for one year.

During the first decade the coal business of the Territory increased two and a half times, and in the second nearly ten times. During the last five years the increase has been from 138,000 tons to 410,000 tons; an increase of nearly three times.

The accompanying diagram and statement show the progress of the Pacific-coast coal-market for twenty-four years ending with December, 1884.

The statement below gives the Government report of the output of the mines in British Columbia for eleven years ending December 31, 1884:

	Tons.
1874	81,000
1875	110,000
1876	139,000
1877	154,000
1878	171,000
1879	241,000
1880	268,000
1881	228,000
1882	282,000
1883	213,000
1884	394,070
Total	2,281,070

From the two statements it will be observed that the bulk of the British Columbia coal—66 per cent.—is marketed on the Pacific coast in the United States. The importance of that coal in this market is also made evident.

The capacity of the British Columbia mines can, in a few months, be increased to that of the entire market, and the same is true of the mines of this Territory.

It is openly asserted by the owners of the Vancouver Island mines that they have strong hopes of the removal of the 75 cents a ton duty, and they are diligently working to this end. A realization of their hopes would be very disastrous to the coal-mining interest of the United States on this coast, especially to that of this Territory. A glance over the above-mentioned statements plainly reveals the fact of the necessity for this Government to at least double the present rate of duty, to protect its coal industries on this coast from foreign products for the next ten or or fifteen years, or until the business gains sufficient strength to cope more evenly with its foreign rivals. At present the competition is very unfairly conducted, from the fact that vessels coming to this coast for wheat or lumber bring with them coal as ballast.

Among those conversant with the facts it is thought that there is much inequality and injustice in the operations of the present coal-land law, and the regulations under it.

Some of these matters were, three or four years ago, laid, by request, before the public land commission, but without any apparent effect. It is thought that the department does not realize the injustice and the hardships which in many instances result to an innocent settler. The law in its application is intended to protect the innocent and to punish the guilty, but in very many instances it does the very reverse.

The coal-land law needs a wise, careful, and thorough revision, so that while carefully guarding the interests of the Government, it shall not oppress, but in every legitimate way foster and encourage, an industry which has so much to do with securing the prosperity and advancing the wealth of a people.

LIMESTONE.

Limestone is found in great abundance and in the vicinity of iron. It is found near Orting, in Puyallup Valley, also on San Juan Island, where it is extensively worked, and in many other places. Thus having all the necessary elements, namely, ore, coal, and coke, and the lime in close proximity, it is reasonable to expect that the manufacture of iron will attain large proportions within a few years.

IRON, COPPER, ETC.

It is an established fact that bog-iron ore of the best quality exists in practically exhaustless quantities throughout the Puget Sound Basin, notably so in Jefferson, King, and Pierce Counties. Very extensive ore-smelting works have been erected in Jefferson County, the capital stock of the company being fixed at \$500,000.

Magnetic iron ore from Texada Island, in the British Columbia Archipelago, and lime rock from San Juan Island, in the American group, the latter used as a flux, are combined, producing an excellent article. This industry is in its infancy, but promises great results. Movements looking to the establishment of iron works in King County and Pierce County are well under way.

As part of the great manufacturing system to be developed in Washington Territory, its crude iron fields must, in the nature of things, assume immense proportions in the near future.

Brown hematite iron ore of an excellent quality has been found in Skagit County, and magnetic ore has been discovered in Snoqualmie Pass, in King County, and copper has been found in the vicinity of the latter.

Charles K. Jenner, esq., of Seattle, has made to me the following report in regard to both the iron ore and the copper:

The claims included in what are known as the "Denny iron mines" are nine in number, located upon four separate veins or lodes. These lodes are situated in King County, about 3 miles northwesterly from Snoqualmie Pass, in what is known as the Iron Mountain. They extend nearly due north and south and are about vertical. The veins range in thickness from 6 to 150 feet. The thickest vein, "The Cliff", is magnetic iron ore, the richness of which in metallic iron and almost absolute freedom from all deleterious substances renders it extremely valuable, especially for the manufacture of Bessemer steel. Following is the result of an analysis of six specimens of this ore made by one of the leading assayers of Philadelphia, Pa:

Sample.	Metallic iron.	Silica.	Phosphorus.	Sulphur.
No. 1	69.39 op.	2.72	0.055	0.042
No. 2	71.17	1.30	0.039	0.005
No. 3	68.56	2.73	0.035	0.019
No. 4	67.17	4.02	0.031	0.041
No. 5	69.40 op.	2.23	0.035	0.008
No. 6	70.18	1.87	0.031	0.012

The presence of phosphorus or of sulphur in any considerable quantity in iron ore is destructive of its value for most purposes, and it will be seen from the result of the said analysis that phosphorus and sulphur are present in the very smallest degree.

An iron manufacturer of Wheeling, W. Va., who uses at his factory iron ore from Lake Superior, pronounces the ore from the Denny iron mines to be superior to any iron ore heretofore known by him for the manufacture of Bessemer steel.

The Denny Iron Mining Company has expended a considerable sum in prospecting and testing a large vein of ore carrying copper and silver, discovered this year upon its property, during the season just closed. The vein has been opened up, and nearly a ton of the ore taken to San Francisco and subjected to a working test by Thomas Price, assayer. Mr. Price reports it as the most profitable copper ore to work that is known where wood, lumber, pure water, and iron are found in close proximity to the vein of copper ore. The copper is extracted by first piling the ore in heaps of from 200 tons upward, and burning the same as a coal-pit is burned in making charcoal. The sulphur in the ore is sufficient fuel to burn the same, as it takes less than one-half cord of wood to burn 200 tons of ore. The ore continues to burn from two to six months, the time of burning being dependent upon the quantity burned at a time and the richness of the same. After the burning is completed pure water is turned upon the burned ore, and the water which seeps from the same is led into troughs containing metallic iron. The copper in the ore is taken up by the water from which it is precipitated upon the iron. The iron disappears as the

copper precipitates and passes off in the water. Professor Price says that copper ore carrying more than 8 per cent. of copper cannot be worked by this process, and the cheapness with which the ore is treated by the above means, and the immense quantity of ore which can be treated at one time, makes the low-grade ore much more profitable to work than the higher grades.

The permanent plant, including works for reducing the iron ore upon the grounds, would cost no more than \$25,000, and with that expenditure the metallic copper from the Denny ore can produce 3 tons of metallic copper per day, at an expense of \$80 per ton.

I have given an outline of the method of working copper by the above process, because it is comparatively new. I investigated the process at Spencerville, Nevada County, California, where it is used by the San Francisco Copper Company, and reported upon the same to the Denny Iron Mining Company.

The great need of this country, from a mineral point of view, is cheap transportation.

The Iron Mountain is less than 70 miles from tide-water, by a good, feasible railroad route, and there are therein millions of wealth, lacking only a railroad to cause its full and immediate development.

OTHER MINERALS.

Of the valuable ores, gold, silver, copper, lead, cinnabar, &c., have been found.

Marble and gypsum are found in King County. Sandstone has been extensively quarried on Bellingham Bay, and in Pierce County, and is found on the Duwamish River in King County, and in many other localities. Remarkable specimens of kaolin have been exhibited, and clay suitable for building and fire brick is plentiful and well distributed. New discoveries of galena and the chlorides are reported in the Colville district. Strong indications of petroleum are found in Pierce County, and boring for oil has been commenced.

PUBLIC LANDS.

Of the total area of Washington Territory—44,796,160 acres—surveys have been completed of 21,164,232 acres, 1,213,837 acres having been surveyed during the fiscal year ending June 30, 1885, leaving a total area unsurveyed of 23,631,928 acres.

Of the unsurveyed portion, the Cascade Range of mountains embraces an estimated area of 5,520,000 acres, and the Olympic or Coast Range 1,480,000 acres, a total of 7,000,000 acres of mountainous land, the greater portion of which is practically unsurveyable, leaving an area of good agricultural and timber lands yet to be surveyed in Washington Territory of 16,631,929 acres, including seventeen Indian reservations, containing 6,332,885 acres partly surveyed.

Official surveys have been made to June 30, 1885, of thirty-two mineral claims and mill-sites, fifteen iron mines in King County, and seventeen gold or silver quartz mines and mill-sites in Eastern Washington.

The following information concerning the public-land laws for the disposal of Government lands in Washington Territory may be useful to the intending immigrant:

All lands which are for sale or other disposal by the Government under general laws are known as public lands, and are divided into land districts, in each of which is a land office presided over by two officers, known, respectively, as the register and the receiver.

There are five of these land districts in this Territory.

The register and receiver act as agents for the Government, and patents will be issued for all lands sold or otherwise disposed of by them, if approved by the Commissioner of the General Land Office, Washington, D. C.

Agricultural lands are disposed of to actual settlers only under the homestead, pre-emption, and timber-culture laws.

Desert lands are such as will not produce crops without irrigation by artificial means.

Timber lands are those not fit for cultivation, being chiefly valuable for the timber, 160 acres of which can be purchased without residence and improvement for \$2.50 per acre; also lands valuable for stone can be purchased under the same act of June 3, 1878.

Within the limits of railroad grants only the even-numbered sections are disposed of by the Government, and these are known as *double-minimum* land, and when entered under the pre-emption law the price is \$2.50 per acre.

Outside the railroad limits the land is known as *minimum* land, and is sold at \$1.25 per acre.

Citizenship is required, or a declaration to become a citizen of the United States, before any public lands can be taken in this Territory.

Only one claim can be taken by the same person under each of the public-land laws of the United States.

THE HOMESTEAD LAW.

Every citizen of the United States who is over twenty-one years of age, or the head of a family, can take 160 acres of the public lands (agricultural) by establishing a residence thereon and cultivating the same in good faith as a home for five years from the date of settlement; or if, after six months' residence and cultivation, such persons so desire, they may commute their homestead claim by paying the Government price therefor; or if a soldier or sailor who, having served in the Army or Navy of the United States during the recent rebellion, has been honorably discharged; the time of his service will be deducted from the five years' residence required. But in such cases, a residence of one year on the land becomes necessary before patent will be issued.

THE PRE-EMPTION LAW.

Residence, cultivation, and sufficient improvements to show the good faith of the claimant are required.

One hundred and sixty acres can be taken of agricultural land; qualification as to age and citizenship is the same as under the homestead law. The claimant must not be the owner of 320 acres of land, nor leave land of his own in this Territory (town lot excepted) in order to settle upon a pre-emption claim, nor take such claim for the purpose of speculation instead of residence and cultivation.

The good faith of every claimant must be clearly established.

He may change his pre-emption filing to a homestead by making proper application to the land office. Not less than six months' residence and improvement are required by law before payment can be made.

On *offered* lands the declaratory statement must be filed within thirty days, and the final proof made within one year from the date of settlement. On *unoffered* lands the declaratory statement must be filed within three months, and the final proof made within thirty-three months from the date of settlement.

The price for minimum land is \$1.25, and for double minimum land \$2.50 per acre.

TIMBER-CULTURE LAW.

Qualifications of claimant the same as to age, citizenship, and good faith.

Amount of land 160 acres. Land must be devoid of timber. During the first year at least 5 acres must be plowed. The second year said 5 acres must be actually cultivated to crop, and a second 5 acres plowed. The third year the first 5 acres must be planted in timber, seeds or cuttings, and the second 5 acres actually cultivated to crop. The fourth year the second 5 acres must be planted in timber, seeds or cuttings, making, at the end of the fourth year, 10 acres thus planted.

If the claim is less than 160 acres, the area plowed and planted will be in the same proportion as for 160 acres; that is, one-sixteenth of the claim. Not less than 2,700 trees must be planted on each acre, and there must be at least 675 living trees on each acre, to entitle the claimant to patent at the expiration of eight years from date of entry.

Residence in the Territory is not required for timber culture.

COAL-LAND LAWS.

Same qualifications as to age and citizenship.

One person can purchase 160 acres of coal land. If within 15 miles of a completed railroad, the price is \$20 per acre; if outside that distance, \$10. An association of persons may purchase 320 acres, or an association of not less than four persons, who make an expenditure of \$5,000 upon their claim, may purchase 640 acres, including their improvements.

Coal-land declaratory statements must be filed within sixty days, and proof and payment made within one year from date of possession.

TIMBER AND STONE LAND LAWS.

Land chiefly valuable for timber and stone, by the act of June 3, 1878, can be purchased in this Territory for \$2.50 per acre; area, 160 acres; no residence or improvements necessary.

MINING LAWS.

The mining laws of the United States, as approved by Congress May 10, 1872, were adopted by the legislature of this Territory.

LAND OFFICES.

The United States land offices are at North Yakima, Olympia, Vancouver, Walla Walla, and Spokane Falls, all of which have sent me statements showing the business of the respective offices for the fiscal year ending June 30, 1885, as follows:

North Yakima.—Entries, 423; acreage of entries, 63,969; lands still vacant, about 12,000,000 acres.

Two-thirds of the land in this district is unsurveyed; some of it in the northern part very valuable.

Olympia.—In the Olympia district there have been 671 cash entries, covering 86,805.09 acres; also 832 original homestead entries, covering 119,534.27 acres; also 183 final homestead entries, covering 26,647.19 acres; also 2 coal-land entries, covering 160 acres, and 11 mineral entries, covering 192 acres; selections of lieu lands by the Northern Pacific

Railroad Company, 129,221.12 acres; making a total of 1,699 entries, covering a total of 362,559.77 acres (including lieu lands).

Vancouver.—One hundred and fifty-six original homestead entries, covering 22,087.83 acres; 100 final homestead certificates, covering 12,905.63 acres; 20 original timber-culture entries, covering 2,717.11 acres; 37 cash certificates, covering 2,405.78 acres; and 129 declaratory statements, covering 17,754.92 acres; making a total of 442 entries, covering 57,871.27 acres.

The business in this land district has materially fallen off since the first of January.

Walla Walla.—In the Walla Walla district there have been cash sales of 28,962.84 acres; 237 homestead entries of 34,038.47 acres; 230 timber-culture entries of 32,591.40 acres; 421 declaratory statements of 63,150 acres; and 170 final homestead entries of 25,451.41 acres.

Spokane Falls.—In this district there were 433 homestead entries, embracing 67,085.91 acres; 216 final homestead entries, embracing 42,380.96 acres; 223 timber-culture entries, covering 33,000.56 acres; 522 pre-emption filings, covering 78,300 acres; and 168 cash entries, covering 17,908.61 acres.

From present indications the business of this office for the current fiscal year will far exceed that of the preceding year, the business for the month of October, just ended, being more than twice as large as it was during the corresponding month of 1884, and the cases docketed for November and December showing a still greater prospective increase.

INDIANS.

In the Territory are six full agencies, comprising sixteen reservations, besides Moses' Reservation, which is in charge of a special Indian agent.

The total Indian population, according to the reports of the agents last year, is about 11,000. Of this number probably not more than three-fifths live on the reservations, while the remaining two-fifths either roam about or have homes of their own on homesteads or land purchased by them, or in villages near white settlements. They are generally peaceable, quiet, law-abiding, and measurably industrious. Those who live on the reservations are generally better off and of a better class than those who live elsewhere, as many of the latter have left the reservations for the purpose of evading the authority of the agents.

Patents have been issued by the United States to all the Indians who have taken claims on the Lummi, Nisqually, Squakson, Swinomish, and Tulalip Reservations. These patents secure the lands to the Indians, but the land is inalienable, and not subject to sale or forfeiture until this Territory shall become a State, when the legislature of the State may remove the restrictions; and if such enactment be approved by Congress the title then vests in the Indians in fee simple; and should the reservations then be abolished the land could be sold by them should they choose to dispose of it.

Lands have also been allotted in severalty to the Indians living on the Chehalis, Muckleshoot, Port Madison, Puyallup, and Skokomish Reservations, but the patents have not been issued.

The whole amount of land reported as being included in all of these reservations is 6,330,125 acres. Of this amount 5,996,040 acres are east of the Cascade Mountains.

The Indian population east of the mountains numbers 6,980, and

that on the west side numbers 4,106. It will thus be seen that, while on the west side the average number of acres per Indian is about 80—which, considering the amount of waste land, is not unreasonable—on the east of the mountains the number of acres is over 850 for each Indian.

The Indians are all self-supporting, those living on the west side of the mountains generally gaining their living by farming, fishing, and lumbering, and those living on the east side by stock-raising, farming, fishing, and hunting.

There are 12 schools on the reservations, with a total attendance of 747 and an average attendance of 630. In addition to this there are probably about 100 children attending the industrial training school near Salem, Ore.

The Colville Agency comprises two reservations in this Territory. The Colville, containing 2,800,000 acres, and the Spokane, containing 153,000 acres, besides the Cœur d'Alêne Reservation, which lies in Idaho Territory. It has 1 school, with an average attendance of 43, located on the Colville Reservation.

Neah Bay Agency comprises one reservation of the same name. Acreage, 23,040; population, 760; of which 250, the Quillehute tribe, live entirely off from the reservation. Average attendance in the schools, 52.

Nisqually and Skokomish Agency comprises five reservations, as follows:

The Chehalis: Acreage, 4,225; population, 142; average attendance in school, 40; with lands allotted but not patented.

The Nisqually: Population, 205; acreage, 4,717; lands patented.

The Puyallup: Population, 565; acreage, 18,062; lands allotted but not patented; average school attendance, 64.

The Squakson: Population, 128; acreage, 1,494; lands patented.

The Skokomish: Population, 230; average school attendance, 40; acreage, 4,987; lands allotted but not patented. Also the Sklallam tribe attached thereto, numbering 401, with a day school at Jamestown, near Dungeness; average school attendance, 21, none of whom live on any reservation.

Quinalt Agency comprises the reservation of the same name. Acreage, 224,000; population, 490; average school attendance, 23. The Shoalwater Bay Reservation is also connected with this agency, and is included in the statistics with the other.

Tulalip Agency comprises five reservations, as follows:

The Tulalip: Population, 500; acreage, 22,490; lands patented.

The Lummi: Population, 275; acreage, 12,312; lands patented.

The Swinomish: Population, 175; acreage, 7,170; lands patented.

The Port Madison: Population, 150; acreage, 7,284; lands allotted.

The Muckleshoot: Population, 85; acreage, 3,367; lands allotted.

The school located on the Tulalip and at the agency has an average attendance of 68.

Yakima Agency comprises only one reservation, which is of the same name. Population, 3,120; acreage, 800,000; average school attendance, 138. The agent reports half of the Indians living off from the reservation.

Columbia Reservation, known as the Moses Reservation, is at present under the charge of a special Indian agent. It is reported to have a population of 150. There may be 200. Number of acres in the reservation, 2,243,040. Mills, school houses, &c., are being erected, but as yet little has been done for the Indians of this reservation.

The sanitary condition of the Indians of the Territory is better than it has been in times past, which is due to their improved manner of living, and also to the improvement of their morals.

They are slowly decreasing, but not so rapidly as generally supposed, and in many localities they are really increasing.

Those who can read and write and are self-supporting are worthy of the right of the ballot.

The general laws of the Territory should be made to extend over them soon, so that all will be treated alike.

As I stated in my last annual report, "it is believed that the system of allotting a suitable quantity of land to them in severalty can and ought to be encouraged. But if they select lands outside of the reservations then a corresponding acreage, or value of acreage, within the reservations to which they belong ought to be surrendered for occupation by the whites. In truth, if they could be induced to concentrate, and altogether abandon certain reservations, it would conduce much to the development of the Territory by settlement and cultivation of large tracts of valuable land that are now unproductive."

FOOD-FISHES AND OTHER MARINE FOOD PRODUCTS OF PUGET SOUND

The whole of the tide-waters of Puget Sound from Cape Flattery, at the entrance of Fuca Strait, to Olympia, at the extreme southern end of Budd's Inlet, as well as all the waters surrounding the islands of the Archipelago de Haro, abound with food-fishes, mollusks, and edible marine algæ, of which the public knows but little.

The principal fish found in our market are the salmon, halibut, true cod (*Gadus macrocephalus*), green or cultus cod (*Ophiodon elongatus*), rock cod (*Sebastichthys*), black cod (*Anoplopoma fimbria*), sturgeon (*Acipenser*), skate, varieties of cottus or sculpin, eulachon or candle-fish (*Thaleichthys pacificus*), smelt (*Hypomesus olidus*), herring (*Clupea*), &c., and of edible mollusks, the oyster, several varieties of clam, holothuria or bêche-de-mer, cuttle-fish, squid, &c.

Of the marine algæ or seaweed which can be used as food we have the *Rhodomenia palmata* or dulse, *Ulva latissima* or green laver, *Porphyra lacinata* or pink laver, all used freely by northern Indians, *Chondrus crispus* or Irish moss, and other varieties, and the giant kelp (*Neoreocystis*), which is used by the natives for fish-lines and as tubes for holding oil. This kelp can also be converted into a leathery, parchment-like material; and being rich with a glutinous viscous substance, called *algin*, is manufactured by the Japanese into thin, almost colorless sheets resembling gelatine, but very flexible, which they use as a tough, transparent paper without fiber, and also as a cheap substitute for glass in lighting houses.

The possibilities of this giant kelp as an element of commerce are very great, and the enormous quantities found on our coasts must prove an element of wealth to our citizens when its valuable properties shall be utilized and manufactories established to prepare it for use.

Salmon.—This fish, which abounds in all the waters of the northwest coast, differs from the true salmon of the east by a peculiar growth of the jaws, especially the male, after ascending the rivers to spawn. This peculiarity has given them the name of *Oncorhynchus*, or hook jawed (a Greek derivation), which designates them from the true salmon (*Salmo*) of the Eastern States and Europe.

Of all the anadromous salmon of the Pacific the spring silver salmon of the Columbia River (*Oncorhynchus quinnat*) is acknowledged the best in size, flavor, and richness, far surpassing any salmon, except, perhaps, the king salmon of Alaska, which is thought to be of this species.

It is a noticeable fact that the larger the river the larger and better the salmon; hence it is that the salmon of the Columbia River exceed in size and flavor the salmon of the Sacramento in California, or the Fraser in British Columbia. Occasionally the *Oncorhynchus quinnat* enters the Strait of Fuca, and is taken by the Indians with hooks baited with herring, or with spoon bait, while trolling in the various bays.

The most abundant salmon of the sound is the *Oncorhynchus nerka*, the "blue-back" of the fishermen.

The *O. keta*, a small but delicious salmon, is found at Quinaiutt, and is also taken at other places on the sound, but not as fat or delicate as those of the Quinaiutt River.

There are five varieties of salmon taken in the waters of Washington Territory which bear the Russian names of *nerka*, *gorbuska*, *kisutch*, *keta*, and the local names of *quinnat* and *kennerlyi*, which have been adopted by Jordan & Gilbert in their description of the salmon of the Pacific coast.

Halibut.—The common halibut of the Atlantic (*Hippoglossus vulgaris*) is an Arctic species, which is found in the northern waters of the Atlantic and Pacific, and seems to be identical, although the halibut of the Atlantic is a fatter fish. The fins, which in the New England sea fisheries, are salted and eaten as luxuries, are smaller and less glutinous in the halibut of the North Pacific.

This valuable food-fish abounds along the whole coast from north of the Columbia to the Arctic Ocean, and is taken in immense quantities by the Indians all along the shores of British Columbia and Alaska. The principal fishery in Washington Territory for halibut is at Cape Flattery, where the Makah Indians annually take enough, not only for their own tribal winter supplies, but to have a lucrative traffic with other tribes in dried halibut.

At present the commercial demand for this fine fish is limited, but when a market can be found for it, either sliced or dried, or salted and smoked, or canned or fresh, shipped packed with ice, it will be found that the supply is unlimited.

Halibut are taken at certain seasons of the year in all the waters of Puget Sound, and considerable quantities are shipped to Portland, Ore., and to the interior towns.

Codfish (*Gadus macrocephalus*, Jordan), *true cod*.—This valuable food-fish, which abounds in Alaskan waters, is not plentiful in the waters of Fuca Strait and Puget Sound, although it seems to breed there, and the young are frequently caught in quantities and eaten as tom-cod. It is probable that these young cod go to the ocean and feed on the various grounds, where they are taken by the natives on banks outside Cape Flattery and along the coast of Vancouver Island. There are numerous places in the Strait of Fuca and Puget Sound well adapted to the drying and curing of codfish, particularly the sand-spits at Port Angeles and Dungeness, which are most admirably located as fishing stations.

Another food-fish which is taken in considerable numbers at Cape Flattery is the *Ophiodon elongatus*, commonly called green cod, cultus cod, buffalo cod, &c. This fish, which resembles the true cod in its mottled markings, differs in many respects. The dorsal fin is continuous from head to tail. This, with all the fins, is composed of thick, fleshy fila-

ments, gelatinous, and is good eating. The body has considerable oil, but the liver none. The flesh is white and good; it is an excellent table fish, averaging from 10 to 25 pounds; specimens weighing 75 pounds are occasionally captured.

Black cod (Anoplopoma fimbria).—This is one of the most delicate and finely flavored of all the salt-water fish of Puget Sound. It is taken in very deep water, and as yet the fishery has not been developed to any commercial extent. The Makah Indians, at Cape Flattery, take them in limited numbers, and they are also caught in all the deep waters of Puget Sound, but the largest are taken at the cape, and are from 10 to 20 pounds weight when fully grown. The full-sized fish is about 24 inches long, although instances are known where it has been found to exceed 4 feet in length and to weigh over 50 pounds. It is shaped like a cod, but is not mottled. It has a dark sepia-colored back with grayish sides and belly. Its characteristics are whiteness and fineness of texture of flesh and richness and delicacy of flavor. It takes salt equally as well as salmon, and, although very fat, does not rust like salmon or mackerel.

Scorpenidae, or rockfish family.—Of the rockfish the *Sebastichthys* are the most numerous, there being no less than twenty-eight varieties found on the Pacific coast, most of them being taken at Cape Flattery. These range from the red grouper, *S. ruber*, to the *S. niger*, improperly called bass. They are all excellent food-fish.

The salmon trout, an anadromous fish, is very plenty and affords excellent sport to the fisherman, and is an excellent dish when properly cooked.

The mountain or brook trout abounds in the streams of the interior.

Smaller food-fishes. The eulachon or candle-fish, the smelt, and herring, are of commercial value, the former from their excessive oiliness. The Indians, particularly of Nass River, British Columbia, extract the oil and sell it under the name of "small fish grease." This resembles lard, and, when freshly prepared, is used as food by the natives.

Smelts are eaten fresh by the white population, and dried in quantities for winter's stores by the natives.

Herring is used fresh, salted and pickled, smoked and dried, and for making oil and guano.

Oil fish.—The waters of Puget Sound abound with dogfish and ground shark, from the livers of which great quantities of excellent lubricating oil are extracted by the Indians and sold to the whites. A manufactory has been established at Friday Harbor, on San Juan Island, where it is proposed not only to extract the oil from the fish, but to manufacture fish-glue from the heads and fins, and guano from the offal. This industry promises to be a success.

Whales abound off Cape Flattery, and numbers are taken by the Makah Indians, who are expert whalers, and boldly proceed to sea in their canoes, each holding a crew of eight men, and attack the whales with harpoons and lances. During the summer of 1885 these Indians killed twelve whales of the kind known as California gray. The blubber is cut into strips and boiled, then dried in smoke like bacon. Both oil and blubber are used by the Indians as food, and when traded off to other Indians the oil is valued at three times the price of dogfish oil, 3 gallons of the latter being bartered for 1 gallon of the former.

Edible mollusks—Oysters, clams, and mussels are found in marketable quantities. Of the former, the native oyster is very small. The eastern oyster has been introduced in limited quantities, but enough to prove that it can be successfully cultivated in our waters.

The oysters of Shoalwater Bay are most plentiful, and several vessels are employed in transporting them to San Francisco. Clams of several varieties abound, and range in size from 1 to 10 inches, and from 1 ounce to 10 pounds in weight.

The principal cannery for clams is at Sequim Bay, Clallam County, where Messrs. C. C. Bartlett & Co., of Port Townsend, have extensive works, under the management of Mr. J. R. Dean, who puts a superior article on the market, which is preferred to the eastern canned clams.

Pickled clams are put up at Olympia and Tacoma.

Mussels of excellent quality are plentiful in Puget Sound, and at Cape Flattery grow to a large size. Occasionally a few are pickled for private use, but as yet no commercial demand has been created.

Seals and sea otters.—Although these are not fishes, yet, being a marine product, they are occasionally classed among the fishes.

The most important is the fur seal, which is taken every spring off Cape Flattery in vast numbers by the Makah Indians and white hunters. Sea otters are taken along the west coast from Gray's Harbor to Point Grenville, and more rarely from Point Grenville to Cape Flattery. This most valuable fur-bearing animal, which one hundred years ago abounded in our waters, has been nearly exterminated, but few being killed each season. Seals, sea otters, and whales are eaten by the Makah Indians, and their oil and flesh form an important item in the food products of the coast tribes.

It is desirable that the United States Fish Commission shall introduce lobsters, oysters, shad and other Eastern fish into our waters; and I venture to suggest the propriety of an appropriation of a specific sum, say \$10,000, by Congress, to be expended under the direction of the United States Fish Commission in developing the fisheries of Puget Sound and other waters of Washington Territory.

MANUFACTURES.

The principal manufacturing interests of Washington Territory are connected with the manufacture of lumber.

There are several large mills possessing first-class machinery, which each turn out a product of lumber valued at from \$500,000 to \$1,000,000 annually, and there are perhaps a score of other mills which do a large and important business in lumber. There are also large furniture factories, planing-mills, sash and door factories, and barrel factories. In metal-working there are important foundries, iron works, boiler works, and copper shops. There are match, stair, ice, and soda factories; brick-yards, breweries, fish-canneries, book-binderies, gas and water works, ship and boat building yards and other minor industries; the total wage roll of which, by careful and reliable computation, has footed up three-fourths of a million dollars per annum.

The business of canning and packing salmon for foreign and domestic markets has assumed large proportions. There are nine canneries on the Washington Territory's side of the Columbia River, and other establishments are situated on Gray's Harbor and on Puget Sound, at Tacoma, at Milton, at Seattle, and at Semiahmoo.

Ship-building is a prominent manufacturing industry of Western Washington. It is learned that there have been built in the various ship yards in Puget Sound since January 1, 1873, a total of 174 vessels, steam and sail, with a total tonnage of 27,133 tons. Fourteen of these vessels were built last year.

The fir timber of Puget Sound is peculiarly adapted for ship-building;

its strength, durability, general superiority, and cheapness over that of other regions is fully established. Hall Brothers, at Port Blakeley, have, within the last twelve years, built 46 vessels, mostly for the coast trade; but 12 of them, including 4 steamers, fly the Hawaiian flag, and are engaged in the inter-island commerce of that country. They especially commend the yellow fir of Puget Sound as being admirably adapted for ship-building, and note the fact that the United States Treasury Department has had the new revenue steamers Corwin and Rush constructed of that material.

There are numerous custom flouring mills scattered throughout the western portion of the Territory, and in the eastern region this industry is rapidly growing in importance. The facilities for employing water power are especially favorable. Spokane Falls, by its situation near the wheat-producing region, and its fine sites for the employment of water power, ought to become a second Minneapolis. The Cascades and Priest's Rapids on the Columbia, the falls at Prosser on the Yakima, those on the Des Chutes, near Olympia, those on the Nooksack and Snoqualmie Rivers, and the falls near Whatcom, are among the most notable points for the establishment of mills using water power.

The paper making industry has been established during the last year at La Camas, and is now turning out an excellent product on a very large scale.

EDUCATION.

In representing the resources and development of the Territory it seems proper to lay stress upon what relates to the moral advancement of its people and the intellectual culture of its youth. Among the inquiries that I receive from abroad are those pertaining to our schools and churches.

Settlers in this Territory should be assured of the brilliant future that awaits the school system of the future State of Washington.

In this Territory the 16th and 36th sections in every township are reserved for school land by the Government. This will aggregate over 2,000,000 acres, which, at the low estimate of \$2.50 per acre, would amount to \$4,500,000. A large portion of these lands, being valuable timber or agricultural land in close proximity to towns or settlements, is at the present time worth \$10 per acre.

By law the interest on the principal of all moneys accruing to the Territory from the sale of lands which have been or may hereafter be given by the Congress of the United States for school purposes, is to be applied in support of the public schools. This is indeed an ample endowment for the future, but does not help us at present.

The people of the Territory take a just pride in their public-school system, and support the same by a suitable rate of taxation, levied by the county commissioners for each county. In addition to this, the fines arising for breaches of certain laws are applied in support of the public schools.

The board of directors of any district may, when in their judgment it is advisable, submit to the qualified school electors of the district the question whether a special school tax shall be raised to furnish additional school facilities for such district.

Under the provisions of the law last referred to many of the towns are supplied with large and expensive school buildings, constructed upon the latest modern plans for convenience and health of the pupils.

The laws provide for a board of education (to be appointed by the governor), who prescribe rules for the general government of the public

schools, grant Territorial certificates and diplomas, and adopt a uniform series of text-books throughout the Territory.

Each county has its superintendent of common schools, and over all is the Territorial superintendent, who has general supervision of public instruction.

I append his

Condensed report of statistics of public schools for the year ending June 30, 1885.

Amount raised for school purposes.....	\$273,962 86
Amount paid for teachers' wages.....	194,787 29
Amount paid for rent of school-rooms.....	1,077 85
Amount paid for repair of school-houses.....	11,114 70
Amount paid for school furniture.....	11,318 09
Amount paid for fuel and other expenses.....	21,513 50
Amount paid for school-house sites.....	2,562 73
Amount paid for buildings.....	35,889 65
Total amount paid for school purposes during the year.....	287,029 33
Amount of school funds to credit of Territory at close of year.....	70,023 40
<hr/>	
Number of children enrolled in public schools during the year.....	26,497
Number of children enrolled in private schools.....	1,836
Number of children in Territory not attending school.....	8,923
Total.....	37,256
<hr/>	
Average daily attendance.....	17,504
Number of teachers employed during the year.....	1,040
Number of teachers employed holding first-grade certificates.....	258
Number of teachers employed holding second-grade certificates.....	453
Average number of months public school has been taught.....	4½
Number of school-houses built during the year.....	102
Number of teachers' institutes held in Territory during the year.....	18
<hr/>	
Estimated value of school-houses and grounds in Territory.....	\$470,328 50
Estimated value of school furniture.....	48,148 62
Estimated value of school apparatus.....	5,486 67
Average salary paid male teachers per month.....	45 38
Average salary paid female teachers per month.....	37 00
<hr/>	
Number of school districts in the Territory.....	858
Number of school-houses in the Territory.....	723
Number of school-houses having school during the year.....	744
Number of graded schools in the Territory.....	24
Number of schools furnished with unabridged dictionary.....	96

HIGHER INSTITUTIONS OF LEARNING.

There are 24 private institutions of learning, consisting of colleges, seminaries, academies, and other institutions of a higher order, at which are in attendance 1,416 pupils under the instruction of 91 professors and teachers. These institutions are referred to under the head of the counties to which they respectively belong.

TERRITORIAL UNIVERSITY.

This institution is located at Seattle, and is the only institution of a higher grade supported by annual appropriations from the Territorial treasury.

Its curriculum of studies, while not fully up to the standard of the best Eastern colleges, is sufficiently comprehensive to embrace nearly all of the branches of general knowledge. The university buildings, embracing the main building and buildings for quarters of faculty and

students, are beautifully situated on a 10-acre tract in the center of a thriving city, and afford accommodations for a large number of students.

The university library contains over twenty-five hundred volumes, with maps, charts, &c., well selected and adapted for the purposes of the school. A large supply of scientific, philosophical, and chemical apparatus has been purchased to illustrate the sciences. A natural cabinet containing over five thousand specimens has been secured, and constitutes an important adjunct in teaching the natural sciences.

The government of the university is vested in a board of regents, appointed biennially by the governor, with the advice and consent of the legislative council. This board, consisting of five members, has a general supervisory control over all affairs pertaining to the institution, and appoints the president of the university and the different faculties.

There are three departments in the university, each of them under the immediate charge of the faculty:

The department of art, science, and literature has a faculty of ten regular professors and instructors. The courses of instruction in this department are four, namely, the classical, scientific, normal, and commercial. A preparatory school is also maintained to fit students for either one of the collegiate courses. A training school for the benefit of students in the normal courses has also been established in connection with the university.

During the last year 219 students were in attendance in this department. Special instruction is also provided in music, painting, and kindred arts.

The department of law is only of recent creation. It has eight professors and one stated instructor in its faculty. The members of this faculty are ranked among the most eminent and able men of the legal profession in the Territory, most of whom give their services gratuitously.

The Territory is an attractive field for the legal profession, and there is no reason to doubt the success of this school.

The department of medicine.—The same remarks apply to the school of medicine, also recently established. The learned gentlemen composing the faculty have taken hold in earnest, and propose to make the course of instruction as thorough as possible. Nine hospitals in Seattle furnish good opportunities for clinical instruction.

The laudable and intelligent public spirit so prevalent in this Territory will undoubtedly insure for the university continued growth and efficiency.

CHURCH ORGANIZATIONS.

The leading churches are well represented in the Territory.

Protestant Episcopal Church.—The Right Rev. Bishop Paddock reports 15 church buildings, 10 missionary stations, 16 Sunday schools, 550 communicants, 750 Sunday-school pupils, and 14 clergymen. Value of church property, \$60,000; church schools, 6—2 at Tacoma, and 1 each at Walla Walla, Vancouver, Dayton, and Seattle.

Methodist Episcopal Church.—The Rev. F. M. Robertson reports 53 charges with organized societies located as follows: Aberdeen circuit, Bay Center circuit, Centralia circuit, Chehalis circuit, Cowlitz circuit, Elma circuit, Lewis River circuit, Montesano, Olympia, Oysterville circuit, Tunwata circuit, Vancouver, Winlock circuit, Chinese mission, Dungeness circuit, La Conner circuit, Nootsack Crossing circuit, Noot-

sack Indian mission, Port Townsend; San Juan circuit, Seattle; Battery street, Seattle; First church, Seattle; Scandinavian church, Semiahmoo circuit; Skagit circuit, Snohomish circuit, South Prairie mission-Tacoma; First church, Tacoma; English mission, Tacoma; Scandinavian, Vashon circuit, West Tacoma circuit, Whatcom, Whidby Island. White River circuit, Bickleton circuit, Ellensburg circuit, Goldendale-North Yakima, Simcoe Indian mission, Asotin circuit, Dayton, Eureka Flatt, Illa circuit, Pataha circuit, Pomeroy circuit, Waitsburg circuit, Walla Walla, Walla Walla circuit, Wallula circuit, Big Bend mission, Cheney circuit.

There are 3,453 church members and 83 Sunday schools. Value of church property is \$150,222. This church will expend \$6,000 missionary money during the present year. It is fostering two educational institutions, one at Spokane Falls and one at Olympia, and contemplates the early establishment of a university at some point on Puget Sound.

Congregational Church.—The Rev. C. C. Otis reports 45 church organizations with 21 buildings and a membership of 850. Churches are established at the following-named places: Semiahmoo, Ferndale, Whatcom, Samish, Fidalgo, La Conner, Port Gamble, Eagle Harbor, Houghton, Snoqualmie Valley, Interlake, New Castle, Black Diamond, Seattle, North Seattle, Tacoma (3), Steilacoom, Lake View, Olympia, Kamilleche, Skokomish, Montesano (2), Spring Brook, Washongal, Mount Pleasant, Spokane Falls, Cheney, Spragne, Colfax, Cha-we-lah, Atahnum, Natchez, Wenas, Yakima, Dayton, Walla Walla (2), and Ritzville. Thirty ministers are in actual service. About \$17,000 are expended in missionary work, besides the amount raised in the Territory. There are three educational institutions under the patronage of the Congregationalists, one at Walla Walla, one at Cheney, and one at Steilacoom.

Presbyterian Church.—The Rev. John R. Thompson reports 59 organized churches besides a number of preaching stations; 52 ministers, 112 ruling elders, 34 church buildings, 3 church academies, 1 at Sumner, 1 at Ellensburg, and 1 at Montesano. There are 2,201 communicants, and 2,430 Sabbath-school pupils. The above figures include 12 ministers, 9 churches, 3 church buildings, 600 communicants, 400 Sabbath-school pupils, and 17 ruling elders, belonging to the Cumberland Presbyterian Church.

Roman Catholic Church.—The Rev. F. X. Prefontaine reports that the Catholic Church has not lost any ground in this Territory in this last year; on the contrary, the population has increased 1,000, making the Catholic population 16,000. One church and 6 chapels have been built, making the number of churches 27 and the number of chapels 11. Number of missions and stations is 62; increase of secular clergy, 3, making altogether 19; number of regular clergy is 11; schools, 6; hospitals, 2; orphanages, 1.

Baptist Church.—No complete report having been sent, that of last year is adopted. The value of church property in the Territory at present is \$45,000, with 33 church organizations, 20 houses of worship, and 785 members. The locations of the Baptist churches are as follows: Seattle, 3, one of them holding services in the Scandinavian language; Tacoma, Olympia, Centralia, Chehalis, Boisefort, Oysterville, Lake View, Whatcom, Skagit, Mount Vernon, La Conner, Puyallup, White River, Walla Walla, Dayton, Alpina, Asotin, Colfax, Pullman, Garfield, Spingle, Medical Lake, Spokane, Cheney, Pine City, and Lone Pine. About \$5,000 per year is expended in missionary work. There is an academy under the patronage of this church at Colfax, and the establishment of a seminary has been commenced at Centralia.

NEWSPAPERS.

An exhibit of the intelligence of our people would be incomplete without mention of the newspapers.

There are 53 newspapers published in the Territory, of which 9 are dailies, and 4 of the dailies receive the Associated Press reports; the remainder are weekly journals, devoted principally to local interests.

BANKS, CAPITAL, INVESTMENTS, AND RATES OF WAGES.

National banks of Washington Territory.

	Capital.	Surplus.	Individual deposits.
First National Bank, Colfax	\$50,000	.....	\$13,470 20
Second National Bank, Colfax	60,000	.....	18,904 26
Columbia National Bank, Dayton	50,000	\$10,000	80,152 98
First National Bank, Dayton	50,000	5,000	33,959 92
First National Bank, Olympia	75,000	3,000	138,062 05
Tacoma National Bank, Tacoma	50,000	25,000	138,767 76
Merchants' National Bank, Tacoma	50,000	.....	48,730 11
First National Bank, Port Townsend	75,000	5,000	192,957 38
First National Bank, Seattle	150,000	20,000	38,084 98
Merchants' National Bank, Seattle	50,000	2,000	57,206 71
Puget Sound National Bank, Seattle	50,000	.....	52,044 54
First National Bank, Spokane Falls	60,000	.....	75,397 95
First National Bank, Vancouver	50,000	.....	48,480 24
First National Bank, Walla Walla	150,000	30,000	283,782 52
First National Bank, North Yakima	50,000	.....	22,434 17

Private banks.—Coffman & Allen, Chehalis; Bank of Colfax, Bank of Garfield County, Pomeroy; Harford & Sons, Pomeroy; F. W. James, Port Townsend; E. B. Downing & Co., Seattle; Dexter, Horton & Co., Seattle; Eshelman, Llewellyn & Co., Seattle; Bank of Spokane Falls; Fairweather & Brooke, Sprague; Baker & Boyer, Walla Walla.

No report of the capital stock of, or deposits in, the above banks are accessible.

There is a great need for more capital in the Territory. The ordinary rate of interest is 1 per cent. per month; often as high as $1\frac{1}{2}$ or 2 per cent. per month is obtained.

The field for investment is wide. Lands in great variety, agriculture, mines, stock-raising, manufactures, railroads, commerce, fisheries, and town improvements, all offer inducements to capitalists.

Rates of wages average at least 50 per cent. higher than those in the Middle States, although now the lowest known here.

Schedule of rates of wages paid in Seattle and other places on Puget Sound, at the present time.

Carpenters	per day ..	\$2 50
Machinists	do ..	3 00
Sign painters	do ..	\$3 00 to 3 50
Boiler-makers	do ..	3 00
Tin-smiths	do ..	3 00
Longshoremen	do ..	2 50 to 3 00
Stone and marble cutters	do ..	3 50
Plasterers	do ..	4 00
Gun and lock smiths	do ..	3 00
Roustabouts	do ..	1 75 to 2 00
Coal-miners (shift work)	do ..	2 50
Coal-miners (by the yard)	do ..	3 00 to 4 00
Mechanical engineers	do ..	3 00 to 4 00
Bricklayers	do ..	4 25

House painters.....	per day..	\$2 75
Shoemakers.....	do.....	2 50
Blacksmiths.....	do.....	\$3 00 to 3 50
Day laborers.....	do.....	1 75 to 2 00
Gas-fitters.....	do.....	3 00
Upholsterers.....	do.....	2 00
Boat-builders.....	do.....	3 00
Plumbers.....	do.....	3 00
Tailors.....	do.....	3 50
Mill-hands.....	per month..	50 00
Bakers.....	do.....	60 00
Farm laborers.....	do.....	*25 00 to 30 00
Molders.....	per day..	3 25
Pattern-makers.....	do.....	3 50
Loggers:		
Teamsters.....	per month..	*65 00 to 70 00
Choppers.....	do.....	*55 00 to 60 00
Skidders and hook-tenders.....	do.....	*45 00 to 50 00
Swampers.....	do.....	*45 00
Sawyers.....	do.....	*45 00 to 50 00
Common laborers.....	do.....	*35 00 to 40 00
Boys.....	do.....	*25 00
Cooks.....	do.....	*45 00

SOIL AND PRODUCTIONS.

A careful account of the flora of the Territory is contained in my report for the year 1884. I also there included a sketch of the geologic formation of the Territory, showing that the Pacific Ocean once flowed unhindered over what is now Eastern Washington, and in retiring left its fine sediment and fossil sea-beach.

Careful chemical analysis has recently shown that the soils taken from various places in this region have an abundant supply of the constituents necessary to give them enduring qualities and adaptability to a variety of crops.

The eastern section is prolific in production of wheat and other cereals, the average yield of wheat being over 25 bushels to the acre.

Tobacco is cultivated to some extent, and delicious fruits, including grapes, peaches, and melons, are there displayed in tempting luxuriance. It is estimated that in four counties alone the enormous yield of 9,000,000 bushels of wheat has been harvested this year.

The central and northern region east of the Cascades is less developed, owing to lack of railroads, until recently, but it has many of the same characteristics. Sweet potatoes, sorghum, tobacco, egg-plant, melons, corn, and hops thrive in the Yakima Valley. Much of this country has hitherto been devoted to stock-raising.

Irrigation.—At a comparatively few localities only is artificial irrigation needed, and in most of these it is readily obtainable at moderate expense. However, there are some places where the soil shows great capabilities and where irrigation is difficult. In order to encourage the purchase and occupancy of such land it seems to me eminently proper for the Government to set on foot a system of irrigation, either directly through its own agents or through some indirect plan of relief and encouragement to the settler.

Western Washington is specially adapted to all the grasses and to oats and the root crops. Some wheat is raised on the uplands; but the rich alluvial bottom-lands are most sought for by the farmer; 2½ to 4 tons of hay per acre each year are frequently obtained.

The following vegetables and fruits grow in perfection in the counties bordering on Puget Sound: Cabbage, asparagus, beans (except

Lima), beets, brussels sprouts, cauliflower, carrots, celery, cucumbers, kale, leeks, lettuce, onions, parsley, parsnips, peas, potatoes, radishes, rhubarb, spinach, squash, turnips, blackberries, currants, gooseberries, raspberries, strawberries, and a certain variety of peaches in favorable locations. The several classes and varieties of fruits are such as are generally cultivated along the belt of the middle latitude, more particularly that district comprising Western New York and Northern Pennsylvania. Many kinds of the apple, pear, quince, peach, with the smaller fruits from the vines and shrubbery, flourish in great perfection. Here the plum and cherry attain a large size and a superior flavor. Corn is but little raised in the western part of the Territory, and then generally for use while it is green.

Our winter climate is so mild that protection of trees and vines is never thought of, and it is very rare that any are injured; nor do the diseases peculiar to the same classes in the Eastern States affect them here, such as the woolly aphis on the apple, the blight on the pear, the black knot on the plum, and the yellows on the peach. That destructive enemy of the plum in the Eastern States, the curculio, is unknown here.

Tide lands.—On Puget Sound 27,000 acres have been diked and reclaimed with great profit.

Wonderful crops of oats are obtained on these lands. Probably 150,000-acres more can be reclaimed.

Sugar.—Recent investigations and experiments have developed the fact that Washington Territory is pre-eminently fitted for the production of sugar, upon a very large scale, from the beet root. We have here the soil and climate suited for cheaply producing a choice quality of sugar beets. We have the necessary lime and cheap fuel at hand, and all the other conditions enabling us to successfully engage in this business except one important factor, which is the course of the Government in admitting the importation of sugar free of duty on the Pacific coast. Undoubtedly the object of the Government is to give the consumers here the benefit of the duty, but the fact is that the people receive no benefit from this remission of the tariff on sugar, because that article is handled by a monopoly that fixes the prices of the imported sugar without reference to its cost, but does so mainly with reference to the markets on the Atlantic coast and the cost of transportation therefrom.

Certain energetic parties have recently interested themselves largely in the production of beet sugar in this Territory, and they feel that the facts as above stated should be represented to the Government, to the end that this important home industry may be protected by suitable legislation.

It is believed that we have a large sugar-producing area, sufficiently so, if developed, to materially effect a change in the source of supply of sugar for the entire nation.

Mr. Ezra Meeker, who has visited all the sugar-producing countries of Europe, and has devoted himself to the development of this industry here, unhesitatingly asserts that the sugar-producing area in this Territory is equal to that of Germany.

HOPS.

The harvest of 1885 has been more satisfactory than was anticipated at the beginning, and more remunerative than expected.

This result has been attained entirely upon the score of quality, the

Washington Territory hops for the first time having reached a standard of value in the markets equal to any raised in the United States.

The crop for the year has been less than an average, reducing the yield to about 13,000 bales, one-half of which will be shipped direct to London for consumption in England.

Although many growers were discouraged in the beginning of the season in consequence of the low price prevailing in the world's market, and later with the report of an enormous crop harvest the world over, yet now the business is more firmly established than ever by reason of the preference given to our qualities, and of the fact that we are able to sell at a profit while other less favored localities are suffering a loss.

The facility with which shipments are now made over the lines of the transcontinental roads, coupled with the free use of the telegraph and cable, has revolutionized our methods of marketing, so that now we ship or sell direct upon the markets, and get a recognition before denied us when compelled to market our hops in San Francisco.

It is believed that there will hereafter be not only a large increase in acreage but a more careful system of culture, resulting in the general production of better qualities at such low cost that this industry will be so firmly established as to remain one of the standard interests of our Territory.

The business of raising hops in this Territory has lately assumed such an importance that, for the purpose of giving full information, I quote the article on this subject in my last report:

Hops.—The climate and soil in the bottom-lands and valleys of Washington Territory seem peculiarly adapted to the cultivation of hops; and more attention seems to have been paid to the cultivation of this plant in the vicinity of Puget Sound than elsewhere in the Territory, where it thrives in rich alluvial sandy bottoms. Within the past few years an increasing interest has been manifested in the business of hop-raising, and the yards have been multiplied and extended.

During the fifteen years since the beginning of its important cultivation in this region this crop has never failed nor been attacked by disease, nor deteriorated by reason of the roots being kept on the same land without being replanted. It is believed that the Duwamish, the White River, and the Puyallup Valleys could easily produce as many hops as are now raised in the United States if labor could be obtained to pick them. Indians have been mainly relied upon to do the picking, and they have flocked to the Sound from nearly all parts of the Territory, even from beyond the mountains. Many have come in canoes from regions near the outlet of the Sound and from British Columbia to engage temporarily in this occupation, then to purchase goods in the adjacent town and return to their old haunts. They appear to excel the whites in their ability for picking, and conduct themselves, as a rule, very peaceably. This year there has been a great scarcity of pickers in proportion to the magnitude of the crop.

I cannot do better in this connection than to quote the very reliable report which I have just received from Mr. J. P. Stewart, of Puyallup:

"There are in cultivation in hops in this valley at this date 1,164 acres, distributed among 103 growers. E. Meeker has the largest yard, 120 acres; this makes the average about 11½ acres to each grower. I am unable to tell you the number of acres of hops last year.

"My average yield for thirteen years has been 2,111 pounds per acre; average price, 22½ cents, reckoning for the thirteen years prior to this. My yield this year is 1 ton per acre. Several growers this year claim to have raised as high as 3,000 pounds to the acre, and two as high as 4,000 pounds. The probable average yield this year is about 1,900 pounds.

"We have been short of pickers this season for the first time, and some hops have gone unpicked on that account, but probably not more than 20 acres in this valley.

"The highest yield on a yard of the second year's growth has probably been more than 1,000 pounds per acre. I usually raise 1,000 pounds the first year I plant."

I also beg leave to submit a more general report which I have just received from Mr. E. Meeker, of Puyallup, who is undoubted authority on this subject.

In a private note he states that while his figures are sometimes approximate, yet he believes them to be generally correct.

He reports as follows:

"In answer to your inquiries with reference to hops grown in Washington Terri-

tory I have to state the following: Number of acres, 2,355; divided as follows: Pierce County, 1884, 1,277 acres; 1883, 1,251 acres; King County, 1884, 878 acres; 1883, 826 acres. Scattering, estimated, 200 acres.

"The average yield of hops in Washington Territory for twelve years last past has been 1,600 pounds per acre, not including the present exceptional year.

"The average price obtained by growers, not including the exceptionally high-priced year of 1882, has been 18 cents per pound, for a period of twelve years.

"The average cost of production for the same period has been 10 cents per pound.

"The quality of our hops rates second only to the New York State hops, which have heretofore been rated as a standard of quality. In some respects ours are better than the New York State hops, because of freedom from disease, cleaner picking, and more uniform color. The market value of our hops now more nearly approaches that of the New York hops than ever before, and will eventually reach the same standard by judicious management of our growers. The keeping quality of Washington Territory hops is better than that of those grown on the Pacific coast further south, and hence in years of large surplus they will command a better price than has prevailed heretofore, when our whole product was shipped to San Francisco, and there sold and classed as California hops.

"The crop of Washington Territory for the four years prior to this has been as follows: 1880, 4,990 bales; 1881, 6,098 bales; 1882, 8,470 bales; 1883, 9,301 bales.

"These figures are taken from the estimate of the Messrs. Lienthal & Co., of San Francisco, and denote only the crop movement through the regular channel of trade for shipment East and to San Francisco; to it should be added those used for local consumption in the Territory and in Oregon, amounting to fully 300 bales each year, to the best of my judgment.

"As stated before, the crop of 1884 is exceptional in this, that it is the heaviest average yield ever grown in any country. It is not yet all marketed, but enough is known to warrant the belief that fully 22,000 bales have been grown, and many place the yield still higher. In some exceptional cases the yield has been simply enormous. I know of hop-yards in both the White River and the Puyallup Valleys that yielded 4,000 pounds per acre; and there have been parts of acres harvested that gave a yield of nearly 5,000 pounds per acre.

"The soil best adapted to raising hops is the alluvial deposit found in the river-bottom land adjacent to Puget Sound; yet good results have been obtained on the table lands in certain localities, notably on the Upper White River.

"The first hops were planted in the Puyallup Valley in the year 1866, resulting in the production of one bale.

"It is noticed that the great increase of production is in the vicinity of the place where the first venture was made. And it has resulted in building up there a very large and prosperous interest.

"Since the opening of the Northern Pacific Railroad direct shipments have been made to all parts of the United States and to London, fully twenty car-loads of the crop of 1884 having up to this date (October 17) been shipped to the latter market.

"Although some have been discouraged by the low prices prevailing several years ago, and by the difficulty experienced in procuring laborers to harvest the crop, it is believed this interest is as yet in its infancy, and that the time is not far distant when our productions will be largely increased, and that the marketable value of our hops will reach a much higher standard than now prevails."

THE EXPOSITION AT NEW ORLEANS.

I have appointed Mr. Ezra Meeker commissioner for the Territory at the North, Central, and South American Exposition at New Orleans. He is well fitted for this position by his long residence here and his acquaintance with our resources. He will make a display of such products as are readily obtainable, including sugar made from beets of this Territory.

CLIMATE.

There is an important difference between the climates of the eastern and western parts of the Territory; the mean temperature in the eastern division being in summer 73° and in the winter 34°; while that of the western division is 63° in summer and 39° in winter.

It may be deemed remarkable that these sections lying contiguous, in the same latitude, and with but little difference in elevation, should differ so much in temperature, namely, 10°. The difference is evidently

owing, in great part, to the range of mountains running north and south, and separating the two sections, thus warding off from the eastern portion of the Territory the immediate effect of ocean currents and ocean breezes.

There is also a great difference between the two sections in respect to the amount of rainfall, the climate of Western Washington affording a greater quantity of moisture.

The climate is especially mild in winter, when we consider the latitude. Variations in temperature are less in the western than in the eastern part of the Territory.

Most people are surprised when they learn that flowers have bloomed in the open air, in Western Washington Territory, during every month in the year. The cause of this lower range of temperature is attributed mainly to the great current in the Pacific Ocean, which, flowing from the tropics, is deflected along this coast, thus producing an effect similar to that caused by the Gulf Stream in the Atlantic Ocean when it strikes the shores of England, making that country milder in winter than the climate of our Eastern States.

For reliable data on this subject I inclose report of the United States Signal Office at Olympia, and under the head of Walla Walla County will be found a report showing the temperature and rainfall for that portion of the Territory.

Tables showing temperature and rainfall are also reported under the heads of Pierce County and Kitsap County, respectively.

Meteorological data and summary for signal station at Olympia, Wash.

[Latitude 47° 3' N., longitude 122° 53' W. Compiled by Sergt. Edgar McGovern, in charge. Elevation of barometer above sea-level, 38 feet; magnetic variation, 22° 57' E.]

Year.	Mean height of barometer.	Highest barometer.	Lowest barometer.	Range of barometer.	Mean annual temperature.	Highest temperature.	Lowest temperature.	Annual range of temperature.	Mean temperature for spring.	Mean temperature for summer.	Mean temperature for winter.	Rainfall and melted snow, total amount.	Rainfall for spring.	Rainfall for summer.	Rainfall and melted snow for winter.
	In.	In.	In.	In.	°	°	°	°	°	°	°	In.	In.	In.	
1878 ...	29.93	30.63	29.07	1.56	50.8	95.0	22.0	73.0	50.8	61.6	41.8	64.33	10.47	1.54	32.05
1879 ...	29.96	30.69	29.17	1.52	49.1	88.5	8.0	80.5	48.8	60.3	38.2	73.44	21.26	5.17	32.97
1880 ...	30.00	30.79	29.12	1.67	47.7	93.5	11.0	82.5	45.6	59.4	38.0	62.79	12.14	2.20	41.51
1881 ...	29.98	30.59	29.15	1.44	49.4	87.0	23.0	64.0	48.7	57.6	38.7	65.56	10.50	3.62	34.04
1882 ...	30.00	30.53	29.17	1.36	48.9	91.5	13.5	78.0	46.9	61.0	39.1	51.59	9.11	2.48	26.03
1883 ...	30.04	30.71	29.27	1.44	49.0	90.0	8.0	82.0	48.7	60.7	36.4	41.61	16.32	0.22	14.00
1884 ...	29.98	30.56	29.17	1.39	49.4	92.0	2.0	90.0	49.8	61.8	36.3	35.58	6.63	4.76	15.46
Mean ..	29.98	.....	.....	.....	49.2	.....	.....	.....	47.1	60.3	38.4	56.41	12.85	2.86	28.01

Meteorological data and summary for signal station at Olympia, Wash.—Continued.

Year.	Wind, mean direction.	Highest hourly velocity of wind.	Total number of miles wind traveled.	Number of clear days.	Number of fair days.	Number of cloudy days.	Number of days in which 0.01 inch or more of rain or snow fell.	Number of days temperature rose above 90°.	Number of days temperature fell below 32°.	Mean relative humidity.	Remarks.
		<i>Miles.</i>	<i>Miles.</i>							<i>Pr. ct.</i>	
1878....	S.	27	34,890	46	120	199	162	1	19	78.3	First frost for fall, October 15.
1879....	S.	36	40,243	60	94	211	197	0	40	80.4	First frost for fall, October 22; last frost for spring, June 16.
1880....	S.	32	39,457	54	127	185	159	1	60	80.1	First frost for fall, September 8; last frost for spring, June 15.
1881....	S.	29	38,668	43	138	178	182	0	18	79.9	First frost for fall, October 3; last frost for spring, May 22.
1882....	S.	48	37,756	53	149	159	183	2	37	77.3	First frost for fall, November 8; last frost for spring, May 20; first snow, December 12.
1883....	S.	28	20,872	99	125	140	134	0	36	76.6	First frost for fall, November 18; last frost for spring, April 24; first snow for fall, November 21.
1884....	N.	42	17,880	87	139	140	146	2	65	78.7	First frost for fall —; last frost for spring, May 28; first snow, December 13.
Mean..	S.	.....	32,824	63	127	173	166	1	39	78.8	

COUNTIES.

ADAMS COUNTY.

Adams County, organized in 1883, is located in the central part of the eastern division of the Territory, is about 50 miles long by 30 miles in width, and is well adapted for pastoral and agricultural pursuits. The assessment roll of this county shows a handsome increase, footing up \$175,444 in 1884, and \$253,420 in 1885. Many new farms have been located and improvements made during the present year, and the county gives every evidence of a strong, healthy growth. Number of school districts in the county is 4; school-houses, 2; average value of school-houses, \$800; total value of school-houses, \$1,600; number of school children, 128; number of teachers, 5; average salaries of teachers per month, \$40. No report of products for this year received.

The county is agreeably diversified by numerous streams, chief among which is the Palouse River, which forms the southeastern boundary between this county and Whitman County. The Northern Pacific Railroad enters this county near the southwestern corner, and, running in a northeasterly direction entirely across, leaves the county near its northeastern boundary, thus affording ample transportation facilities for the shipment of farm products. The county is well adapted for the productions of vegetables, hardy small fruits, grasses, live-stock, dairy products, and all kinds of cereals. County seat, Ritzville.

ASOTIN COUNTY.

Asotin County, another of the counties created by the legislature of 1883, is the extreme southeastern county of the Territory, and occupies a superficial area of about 500 square miles. The surface is agreeably diversified by hills, valleys, and streams. The soil and climate are ex-

tremely well adapted to the production of wheat and other cereals, also small fruits, including peaches and grapes. The taxable property of the county is assessed at \$475,006, an increase of about \$70,000 over last year. The county auditor reports a healthy growth, and a large increase of production over that of last year. Number of school-houses, 14; school districts, 15; number of school children, 475; number of teachers, 15; monthly salary of teachers, from \$30 to \$60. The number of school districts has increased in five years from 2 to 15. On the entire eastern and part of the northern boundary of this county flow the navigable waters of the Snake River. Asotin is the county-seat.

CHEHALIS COUNTY.

Chehalis County lies on the extreme western border of the Territory, having the Pacific Ocean for its western boundary, and embraces an area of about 2,400 square miles.

The Chehalis River, a navigable stream, extends across the county from east to west, and flows into Gray's Harbor. This harbor is considered one of the best and safest on the coast, affording good anchorage, with from 30 to 50 feet depth of water, and covering an area of about 4,500 acres. The entrance to the harbor is over a bar carrying 20 feet of water at mean tide, with a well defined and safe channel, and vessels can approach the harbor with comparative safety. The distance between the headwaters of Gray's Harbor and the head of Puget Sound is only about 40 miles. A survey has been made and a practical route found for a railroad between these waters.

Several rivers within the county, namely, the Humtulp, Hoquiam, Wishkah, Satsop, Elk, and Johns, afford sufficient flow of water for transportation of the fine timber, which abounds in immense quantities along these streams. The excellent timber and easy outlet to the sea through Gray's Harbor, destines this to become one of the most valuable lumber districts in the Territory. Large bodies of fir, cedar, spruce, cottonwood, ash, and maple, all of valuable quality, are found within the limits of the county.

There are already seven saw-mills in operation, with an aggregate capacity of 160,000 feet daily. Two large mills in course of construction will, when completed, increase the capacity to 275,000 feet daily. The county has also two flouring-mills, four sash-and-door factories, two salmon canneries, and one tannery.

The Chehalis Valley, through which flows the river bearing the same name, is one of the finest and largest agricultural sections in Western Washington. The stock and dairying business is carried on extensively, the soil being productive to an extraordinary degree. The climate is mild and salubrious.

The principal towns of the county are Montesano, with a population of about 1,000; Aberdeen, 400, Hoquiam, 300; Cosmopolis, 150; Lower Montesano, 150; and Elma, 250.

The population has greatly increased, as shown by the following:

1883	1, 290
1885	2, 402

The assessed valuation of property also shows gratifying increase, as follows:

1882	\$376, 022
1885	1, 174, 795

The public schools are in a good condition. The Chehalis Valley Academy, recently established under the patronage of the Presbyterian

Church, is the principal educational institution in the county. It has a fine and commodious building, and opened with 26 students. Montesano is the county-seat.

CLALLAM COUNTY.

This county, situated on the Pacific Ocean and along the Straits of Fuca, consists largely of mountainous country covered with valuable timber, with fertile valleys here and there interspersed, which are adapted for agriculture and grazing.

There are some natural prairies which are occupied by settlers. The county is thinly populated, having only 160 permanent settlers, hence much land is unoccupied. The Quillibute Indian Reservation is situated in the southwesterly part of the county. There is a trail 75 miles in length leading across the country, which connects this reservation with Pysht, on the straits. The principal industries are stock-raising and lumbering.

The Neah Bay Indian Agency for the Makah tribe is located in this county near the entrance of the Straits of Fuca. The members of this tribe possess much ingenuity in boat-building and basket-work, and are remarkably skillful in fishing, being considered excellent whalers.

Fresh Water Bay, in the district of Pysht, is situated on a river which is the outlet of a fresh-water lake said to be alive with mountain trout weighing from 1 to 5 pounds.

Elwah is one of the oldest settled parts of the county, and has an energetic farming population.

There are a number of points on the Straits of Fuca suitable for harbors. The principal ones thus far are at Crescent Bay, Port Angeles, and New Dungeness. The harbor at Port Angeles is by nature remarkably adapted to the entrance and protection of vessels. This is situated 17 miles south of the harbor of Victoria, British Columbia. The Government has reserved and set apart a large tract of land on this harbor for public purposes.

New Dungeness is the county-seat. The United States Assistant Fish Commissioner says that both Port Angeles and Dungeness are admirably located as fishing stations. Wheat, oats, and barley are raised, and the average yield of wheat is said to be 40 bushels to the acre, and the yield of such vegetables as potatoes, turnips, and carrots is said to be immense. The people of this county desire that Congress appropriate money for the construction of a military road from Port Angeles to Neah Bay. The assessed valuation of property is \$217,509.

CLARKE COUNTY.

Clarke County, named in honor of Capt. Meriwether L. Clarke, U. S. Army, of Lewis and Clarke's expedition, is situated on the Columbia River in the southern part of the Territory, and has an area of about 600 square miles. It is bounded on the south and west by the Columbia, on which it has a shore line of 40 miles. The surface is comparatively level in the southern and western portions, and gently rolling in the northern and eastern, as the Cascade Range is approached.

There is a great variety of timber, also considerable open country adapted to agriculture, stock-raising, and fruit culture in all its branches known to this latitude.

Portland, Ore., the metropolis of the Northwest, can be reached from any point on the Columbia in the county by 12 to 20 miles travel by

steamboat, thus affording market facilities superior to those of any other county in the Territory. Lewis River, a small tributary of the Columbia, intersects the northern part of the county, and is navigable for small steamboats for about 20 miles the greater portion of the year.

The stock range is excellent, and hay is one of the most important crops. For these reasons, and on account of the superior market facilities, dairying is rapidly becoming one of the most important industries. The soil and climate are peculiarly favorable to fruit-growing, which becomes each year more extensive.

The quantity of agricultural products produced in the county as stated in the report for 1884 was overestimated. A more careful estimate gives for the year 1885 the following figures:

Articles.	Quantity.	Articles.	Quantity.
Wheat.....bushels..	100,000	Oats.....bushels..	200,000
Rye.....do.....	4,000	Corn.....do.....	2,000
Barley.....do.....	2,500	Buckwheat.....do.....	1,000
Potatoes.....do.....	400,000	Apples.....do.....	20,000
Peaches.....do.....	1,000	Plums.....do.....	2,000
Cherries.....tons.....	150	Prunes.....tons.....	200
Butter.....do.....	125	Cheese.....do.....	20
Hay.....do.....	50,000		

The live stock is estimated as follows :

Horses.....	4,000
Sheep.....	4,000
Mules.....	175
Swine.....	7,500
Neat cattle.....	6,500
Angora goats.....	100

The total assessed value of property in the county for the year 1885 is a trifle in excess of \$2,000,000, including the supplemental assessments made by the county authorities after the tax-roll was completed by the assessor.

The increase over last year is 21 per cent.

The county is divided into 63 school districts, in which are 59 school-houses of the total estimated value of \$60,000. Raised for school purposes this year, \$15,000. Total school population between the ages of 4 and 21 years, 3,321. Teachers, 65. Average salary per month, \$35. Highest salary, \$100. Lowest salary, \$20. There are in the county 5 Methodist Episcopal churches, 5 Roman Catholic, 2 United Brethren, 2 Christian or Disciple, 2 Presbyterian, 1 Congregational, and 1 Protestant Episcopal. The total population of the county is 7,670. Manufactures: 6 steam saw-mills, 7 water-power saw-mills, 2 steam and 3 water-power planing-mills, 1 paper-mill. Aggregate value of lumber manufactured this year, \$300,000. Flour, \$200,000.

The cities and towns are as follows:

Vancouver.—The county-seat, beautifully located on the Columbia River, 6 miles above the mouth of the Willamette, has a population of 3,000. This place has improved rapidly during the past five years. Over \$400,000 worth of new buildings, public and private, have been built during that time. The court-house cost \$40,000, and the public school-house about \$22,000. The Masonic Temple, now being built, will cost about \$15,000.

Adjoining Vancouver City is the United States military post, Vancouver barracks and depot, the headquarters of the Department of the

Columbia, General Gibbon commanding. This is one of the largest Army posts in the United States.

Vancouver has never been "boomed" to any extent. Its growth has been steady and permanent, and there is no more prosperous town in the Territory.

La Camas.—This place deserves special mention. Two years ago a syndicate of Portland, Oreg., capitalists, purchased a tract of 2,500 acres of land, and commenced the work of improving a fine water-power afforded by La Camas Creek. The progress of the work practically falls within the past year. Its visible results so far are as follows :

Dams, aqueduct, and pipe lines for the control and delivery of water, covering a distance of 9,000 feet, at an approximate cost of \$100,000 ; a lumber-mill with a capacity of 35,000 feet per day ; a paper-mill with capacity for turning out 10 tons of product per diem ; a flouring-mill of 50 barrels per day, all completed and running. Around these works a town, estimated to have 500 inhabitants, has grown up.

The amount of money expended by the syndicate and by other individuals cannot fall short of \$300,000, and this is a place which was an absolute wilderness eighteen months ago. .

The towns and mills are located at deep water on the Columbia River, about 15 miles northeast of Portland, Oreg. The building of a railroad has been commenced, to run northward from the Columbia River into the timber and coal fields of Clarke and Cowlitz Counties.

La Center, on the Lewis River, has a population of 250. Washougal in the eastern, and Union Ridge in the western, part of the county are thriving villages.

COLUMBIA COUNTY.

This is one of the great grain-producing counties of the southeastern portion of the Territory. It is estimated that there are now 90,000 acres under cultivation, of which 70,000 acres produce wheat.

Dayton, the county seat, is a flourishing town of about 2,000 people, situated on the Touchet River, and is the center of a valuable trade of the surrounding agricultural country, and has numerous manufacturing industries.

One branch of the Oregon Railway and Navigation Company's road extends to Dayton, its terminus, and another branch of this railroad runs to Riparia, situated on the Snake River, in this county. These branches of the railroad, together with the navigable Snake River, which forms the northern boundary of the county, afford great facilities for the shipping of crops to market. Flouring-mills, woolen-mills, and saw-mills have been erected at various parts in the county, and water-power is sufficiently available for manufacturing purposes. The total population is 5,906, and is rapidly increasing. Schools and churches are well patronized. There are 46 school districts, and 43 school-houses of the average value of \$732 each. Total value of school-houses, \$31,480 ; number of school children in county, 2,056 ; average salary of teachers, \$48 per month. One seminary is located at Huntsville. Grace Hall, an educational institution for girls, has been established at Dayton by the Episcopal Church. Assessed valuation of property is \$2,569,380.

COWLITZ COUNTY.

Cowlitz County is one of the earliest settled counties of the Territory. It has a frontage on the Columbia River of about 40 miles, and railroad connection with Puget Sound by the Northern Pacific Railroad, Kalama,

the county-seat, being the point at which trains are transferred by ferry to the Oregon side of the Columbia. The chief industries are farming, lumbering, salmon-fishing, and salmon-packing. Nearly all kinds of fruits, vegetables, and cereals, such as are indigenous to the temperate zone, thrive here. The population is 2,945; number of acres of improved land, 6,616; unimproved, 135,404; assessed value of property for the present year, \$819,577, an increase of more than \$106,000 over last year. Tax levy for all purposes, $17\frac{3}{4}$ mills; number of fruit-trees, 40,000; bushels of fruit raised, 21,000; potatoes, 48,000 bushels. Horses in the county, 960; cattle, 9,600; sheep, 12,000; swine, 4,800; number of school districts, 34; amount of school fund, \$4,000; average monthly wages of teachers, \$40.

Coal has been discovered on Cowlitz River, and there is a fine ledge of granite near Kalama.

With fine soil, healthy climate, an enterprising and industrious population, excellent market facilities, and large tracts of land available for settlement on the upper waters of the Cowlitz and Lewis Rivers, Cowlitz County offers fine inducements to persons seeking homes in our Territory.

DOUGLAS COUNTY.

Douglas County, set off from Spokane County at the last session of the legislative assembly, occupies an area of about 5,000 square miles just east of the geographical center of the Territory. Population, 362. The assessed value of property in the county is \$137,615. County tax levy, 8 mills. Live-stock in the county: Horses, 1,000; cattle, 2,000; sheep, 20,000. School districts, 6; school children, 60.

The climate is pleasant during the summer, never getting very warm, and it is never very cold in winter. The soil is a light sandy loam, well adapted to agriculture and cattle-raising. All grains except corn, and all vegetables, grow and ripen to perfection. Experiments in tree-planting have proven very successful. Wheat sowed in "old ground" produced 40 bushels per acre last year.

This is the finest and largest body of unbroken prairie land in the Territory, and would undoubtedly be settled more rapidly than any part of the now vacant land but for the scarcity of water, which the settlers thus far have been unable to obtain on the largest portion of the prairie, owing to their limited means of sinking wells, many of which have been sunk from 60 to 100 feet and failed to get water. One well was sunk 225 feet with the same result. The people desire that Congress make an appropriation to be applied to sinking one or two artesian wells on this prairie, thereby testing the question whether or not water can be obtained. If this experiment should be successfully made, thousands of acres of the finest soil in the world would be cultivated, and many immigrants who are now turning away on account of the scarcity of water would find homes here. And sales of land by the Government to actual settlers would in a very short time return into the National Treasury a far greater amount of money than need be thus appropriated. Okanogan is the county-seat.

FRANKLIN COUNTY.

Franklin County is now in the second year of its existence, having been organized by the legislature of 1883. It contains an area of about 1,400 square miles. Upon the east boundary flows the navigable Snake River and on the west the Columbia River, the confluence of these rivers being at the southernmost part of the county.

The county is divided into two nearly equal parts by the Northern Pacific Railroad, which enters the county at the southern boundary and runs almost directly north, there being nearly 80 miles of railroad in the county. The chief industry is the raising of cattle and horses; the immense area of bunch-grass plains affords excellent pasturage throughout the entire year. A few farms have been opened on these plains, and experiments have been made in fruit-culture which have been attended with success.

The towns are Palouse Junction, Pasco Junction, and Ainsworth, the latter being the county-seat. The assessed valuation of property is \$102,159, exclusive of assessed railroad property to the amount of \$488,390. The county tax is 8 mills, and the total tax for all purposes is 13 $\frac{1}{4}$ mills. The county is free from all debt and has money in its treasury.

The county auditor writes:

Two of the greatest benefits that could be conferred upon us is the speedy opening of the Columbia River to the sea, and an appropriation to sink two or three artesian wells.

The county at present has but one school district, and one school building which cost \$550. Number of school children, 80; attendance, 35, and one teacher at a salary of \$50 per month.

GARFIELD COUNTY.

Garfield is another of the important grain-producing counties in the Territory. It is reported that 77,000 acres have been cultivated to wheat during the present year.

The navigable Snake River forms the northern boundary of this county, and greatly assists to develop its commerce.

There are a number of lumber-mills, planing-mills, and other factories; also several flouring-mills, each having a capacity of about 100 barrels per day. Stock-raising is an important branch of business. Oats, barley, Indian corn, potatoes, apples, peaches, plums, and pears are produced. Population of county, 3,451; number of school districts, 34; school-houses, 26; total value of school-houses, \$15,000; assessed value of property, \$1,124,208. Pomeroy is the county-seat.

ISLAND COUNTY.

Island County comprises the islands of Whidby and Camano, the former of which contains an area of 115,000 acres and the latter 30,000 acres. Total population, 932. Farm products are raised in good quantities and grow to a high state of perfection. Many portions of the islands are heavily timbered with fir, cedar, hemlock, alder, spruce, maple, and ash. At Utsalady is located one of the largest saw-mills of the Puget Mill Company, capable of a daily output of 90,000 feet of lumber. Ship-building is also carried on to some extent. Coupeville is the county-seat. The community here consists of active, thriving people, possessing stores, hotels, markets, blacksmith-shops, manufacturing industries, public buildings, churches, &c. There are 9 school districts, 8 school-houses, and 323 children. Daily steamers, carrying mail, connect with points on the sound. Apples, pears, plums, peaches, cherries, and prunes, &c., of fine flavor grow in profusion. Stock-raising and dairying are successfully conducted.

JEFFERSON COUNTY.

Jefferson County extends from Admiralty Inlet on the east to the Pacific Ocean on the west; lies between Clallam County on the north and Kitsap County on the south, and contains upward of 15,000 square miles. The western end of the county, lying along the ocean about midway between Cape Flattery and Gray's Harbor, is still a howling wilderness, and although reliably reported to be rich in agricultural soil and valuable timber, it has never been even thoroughly explored. The eastern end only, bordering upon Puget's Sound at the junction of Fuca Straits with Admiralty Inlet, or Puget Sound proper, at Port Townsend Bay, Port Discovery Bay, and at Hood's Canal, contains all the settled and developed portion of the county. This settled portion includes the Discovery, Leland, Quilcine, Decaboos, and Chimacum Valleys, the last-named already famous as a dairying region and for its product of iron ore. The central portion of the county lies across the Olympic Range of coast mountains, the highest peaks of which are clothed in perpetual snows, yet have been explored sufficiently to disclose large valleys, valuable for stock ranges, also deposits of coal, iron, and precious metals. It contains seven post-offices, four large steam saw-mills, one iron-smelting furnace, and already maintains a population of 2,641 souls, having increased from 2,175 in the year 1880. From its geographical location as to the commerce of Puget Sound, Jefferson is one of the most important counties in the Territory. Port Townsend, its county-seat, is one of the leading towns on Puget Sound, and the importance of its commercial prospects are indicated by several significant facts: (1) It is located just inside of the line of fortification proposed for the defense of inland waters. (2) It is the port of entry for the entire customs collection district of Puget Sound. (3) The beautiful bay on which it is located has a length of 6 miles and an average width of 3 miles, free from rocks, bar, or shoal, with anchorage neither too deep nor too shallow, and room for the entire navy and merchant marine of the United States to ride in safety at one time. (4) It is a natural center of trade and travel, having mail-routes and lines of travel radiating in all directions. It is nearly opposite Victoria, the seat of provincial government for British Columbia, and is connected therewith by a daily mail, and is also the southern terminus for proposed mail service to Alaska. It has a semi-weekly mail to all post-offices in Clallam County along the Straits of Fuca, a distance of 90 miles westward; a semi-weekly and proposed daily mail northward 100 miles to Semiahmoo, near the British Columbia boundary line, and intermediate points in Whatcom and San Juan Counties; a tri-weekly mail to Island County, daily mail to all southern ports on the sound, and daily mails to local points within the county, all carried by steamers; besides, it has the first port on Puget Sound reached by ocean steamers every eight days from San Francisco.

Port Townsend has a population of 2,000, and is one of the healthiest, prettiest, and most prosperous towns in the Territory. Its growth is already characterized by magnificent brick and stone buildings, indicating a solidity and stability seldom noticed among the young and growing towns of the West. The new Government custom-house to be erected here; the United States marine hospital, already built; the military station at Fort Townsend, three miles distant, near the head of the bay; the steam saw-mill in the edge of the town; sash-and-door factory; foundery, machine-shops, brewery, cigar factory, and the magnificent smelting works and mammoth saw-mill on the southern shore of the bay,

all bespeak a city here in the near future teeming with a hardy, industrious people and buzzing with manufacturing industries. It is the seat of a district court having both United States and Territorial jurisdiction, to which four adjoining counties are attached for judicial purposes.

The immense maritime business transacted here through the customs collection district, amounting in duties to upward of \$70,000 annually, brings an extensive local trade with shipping. The large ocean trade with foreign countries necessitates the presence here of British, French, Chilian, and other consuls.

Port Townsend's fine public school, her opera-house, her four churches, all indicate intellectual culture and literary privileges, while her First National Bank, organized two years ago with \$50,000 capital—subsequently increased to \$75,000—in its large and substantial stone building, indicates a healthy and solid business basis. Some of its fire-proof business buildings erected this year will compare favorably with those for similar purposes in San Francisco. The board of trade at Port Townsend reports as follows:

Showing importance as the port of entry for the Puget Sound customs district, we may say, that during the last fiscal year a greater number of American steam vessels engaged in the foreign trade entered and cleared at this port than at any port in the United States, and their tonnage was only exceeded by the tonnage of the same class of vessels that entered and cleared at the port of New York. The number entered was 570, with a tonnage of 264,655 tons, against 239 at New York, with a tonnage of 351,573; 165 at San Francisco, with a tonnage of 236,769 tons; 140 at Charlestown and Boston, with a tonnage of 108,414; and 123 at New Orleans, with a tonnage of but 55,735. The number cleared was 573, with an aggregate tonnage of 293,751, against 227 at New York, with a tonnage of 338,815; 162 at San Francisco, with a tonnage of 231,935; 145 at Boston and Charlestown, with a tonnage of 105,007, and only 95 at New Orleans, with a tonnage of but 35,798. Of American vessels, sailing and steam, the number was only exceeded by New York, and the tonnage by the two ports of New York and San Francisco. The number entered was 675, with a tonnage of 312,090, against 1,869 at New York, with a tonnage of 1,006,555; 624 at Boston and Charlestown, with a tonnage of 304,376; 452 at Philadelphia, with a tonnage of 222,258; 416 at San Francisco, with a tonnage of 425,529; 216 at New Orleans, with a tonnage of 81,670; 187 at Baltimore, with a tonnage of 69,567, and all others still less in both number and tonnage. There were cleared 700 of this class of vessels, with a tonnage of 333,694, against 1,432 at New York, with a tonnage of 936,762; 421 at San Francisco, with a tonnage of 460,667; 322 at Philadelphia, with a tonnage of 183,438; 185 at Baltimore, with a tonnage of but 61,686, and all others of the one hundred and thirty-one ports in the United States still less in number and tonnage.

When we take into calculation all classes of vessels, steam and sail, American and foreign, the number that entered and cleared in the foreign trade during the last year is only exceeded by seven other ports in the United States—New York, Boston and Charlestown, San Francisco, Philadelphia, New Orleans, Huron, and Oswego—and in tonnage by only nine other ports in the United States, those just mentioned, and the ports of Baltimore and Superior added. The amount of commerce has nearly doubled for the last two years. In 1880, the number of vessels entered and cleared was 592, with a tonnage of 405,320; in 1881, 628, with a tonnage of 318,459; in 1882, 766, with a tonnage of 457,844; in 1883, 1,062, with a tonnage of 534,824; in 1884, 1,437, with a tonnage of 687,035.

During the last fiscal year, the tonnage of American vessels in the foreign trade which entered and cleared at this port was exceeded by four of all the ports of entry in the United States, and the tonnage of foreign vessels in that trade was exceeded at but six of the said ports. Only one port in the United States exceeds Port Townsend in American ocean steam vessels in foreign trade, and the tonnage of foreign ocean steamers in said trade is exceeded by only seven of said ports.

Jefferson County has a tax-roll footing up in round numbers \$1,000,000; her scrip is sold at par, and her educational advantages are superior, schools being maintained, on an average, eight months or more each year, even in the country districts.

At Irondale, on Port Townsend Bay, the Puget Sound Iron Company has expended about half a million dollars in preparation for manu-

facturing iron, and has the only smelting works north of Oswego in Oregon.

At Port Discovery and Port Ludlow are two mammoth saw-mills, each having a cutting capacity of 150,000 feet of lumber per day, both operated continuously; on Port Townsend Bay is another mill in course of construction, nearly as large.

KING COUNTY.

The area of King County is 2,040 square miles, and it has a greater diversity of resources and greater natural wealth than either one of the several States of the Union. When the resources are fully developed, they will sustain in comfort the population of a great commonwealth. The most important of the resources are timber, coal, iron, marble, and copper. There is practically an inexhaustible quantity of each of these elements of wealth. The agricultural lands of the county are of wide extent and marvelous fertility. Of the above-named area, 700 square miles are mountainous and contain the coal and mineral deposits. There are estimated to be 350,000 acres of good agricultural land, 190,000 acres of which are in the river bottoms, and yield almost fabulous crops of hay, oats, barley, and the staple root crops. There are some 1,200 square miles of timber, divided into 80,000 acres of hard wood (maple, alder, and ash), about 6,000 acres of white pine, about 64,000 acres of cedar, and 640,000 acres of fir, and perhaps some 10,000 acres of spruce. There are known to be some 40 to 50 square miles of coal land, about 16,000 acres of which are more or less developed. The population of the county is 16,160, it being by far the most populous as well as the wealthiest in the Territory.

Timber.—The hard-wood timber will average about 10,000 feet to the acre, and the other varieties will average 30,000 feet, making a total of about 22,000,000,000 feet in the county.

Lumber-manufacturing.—Lumber-manufacturing, next to coal-mining, is the most important industry. The product is mainly absorbed in the home and sound market. All kinds of wood-work incident to the building trade are carried on in the city of Seattle. There are several furniture manufactories also in the city. The number of saw-mills in the county is 16, with an aggregate daily capacity of 500,000 feet, and ranging from 15,000 to 100,000 feet each. Ten of these mills are in the city of Seattle. The aggregate value of these saw-mills and plants is about \$4,000,000, and they employ, when running, nearly 700 men. There are three ship-yards in Seattle having marine ways, and the building and repairing of steamboats is a considerable industry.

Coal.—Coal-mining is now the most important industry. The coal-fields of King County not only contain better coal and are more extensive, but they are developed to a greater capacity than any other coal-fields on the Pacific coast. Indeed, the output for the coming year is likely to be greater than from all the other fields combined. In this industry much progress has been made during the year past. Three new collieries have been opened, viz, Cedar River, Black Diamond, and Franklin. The last two produce semi-bituminous coals of a superior quality, said to be the best steam coals now in use on the coast. Of these mines, the Black Diamond has been the most developed, being able to ship from two slopes from 800 to 1,000 tons of coal per day. A third slope is being sunk, and when completed, the daily output of the mine will be from 1,200 to 1,500 tons. There are good veins of true bituminous coal in the county, but, there being no transportation to them,

they have not been developed. There are several thin veins of anthracite, but none that are workable have yet been found, although many are confident that they exist.

Iron.—Lying in the Snoqualmie Pass, near the summit of the Cascade Mountains, is probably the richest and most remarkable deposit of magnetic iron ore in the world. This deposit is inexhaustible, and its great value is shown by the following analysis of several samples:

Sample.	Metallic iron.	Silica.	Phosphorus.	Sulphur.
No. 1.....	69.39	2.72	0.035	0.042
No. 2.....	71.17	1.30	0.039	0.005
No. 3.....	68.56	2.73	0.035	0.019
No. 6.....	67.17	4.02	0.031	0.041
No. 7.....	69.40	2.23	0.035	0.008
No. 8.....	70.18	1.87	0.031	0.013

Overlying this ore is an almost inexhaustible quantity of white marble of most excellent quality. Adjoining the iron-ore claims are rich veins of copper and silver. These ores are without means of transportation to tide-water, but a company has been organized to build a railroad from Seattle to the mines, a distance of 75 miles.

Eastern steel manufacturers who have examined the ores, and from whom the foregoing analyses were obtained, contemplate extensive works, for the reduction of these ores and the manufacture of steel, as soon as transportation is afforded.

Very large and rich deposits of both red and blue hematite iron ore can be reached by a short branch of less than 7 miles from the main line of the projected road. This ore assays 65 per cent. of metallic iron. The distance from Seattle to these hematite deposits is about 60 miles.

The main line of the road will run through three extensive coal-fields, one of which is superior lignite, and the other two are bituminous. The bituminous coals are very rich in carbon, and make a strong coke.

Agricultural resources and products.—The agricultural lands, especially in the river bottoms, are very rich, and produce an enormous yield of hay, oats, and potatoes. Nearly every variety of garden produce grows in the greatest profusion. Fruit-trees prosper, and abundant crops of apples, pears, peaches, cherries, and plums are grown. The smaller fruits, such as strawberries, blackberries, &c., are cultivated with wonderful success. The total value of the agricultural crops this year, exclusive of hops, is not far from \$200,000.

Hops.—Hops are the most important crop grown in the county. There are about 900 acres in the hop-yards of this county, and the crop this year will probably average at least 2,000 pounds to the acre. Owing to the low price, the growers will not realize more than the bare cost of making the crop. The total value of the crop at present prices will not exceed \$175,000. The ranch of the Hop Growers' Association at Snoqualmie Prairie, in this county, is the largest hop-ranch in the United States, and, with one exception, the largest in the world. The yard now contains 250 acres, which is being yearly increased. Owing to the dry season, much land has been cleared this year and prepared for cultivation.

Railroads.—There are now about 80 miles of completed railroad within the county limits. The completion of the line of 75 miles, heretofore referred to, will afford King County a very complete system of internal transportation and rapidly develop its marvelous resources.

Water transportation.—The shore line of King County on Puget Sound is about 60 miles, exclusive of the 30 miles shore front of Vashon Island, and a shore line of about 80 miles on navigable fresh-water lakes, viz, Lakes Union, Washington, and Samamish. Lake Washington is the second largest lake in the Territory. A ship-canal of less than 2 miles over an easy route would connect Lakes Union and Washington with the tide-waters of Puget Sound in Seattle Harbor. The project of connecting these lakes by canal with the sound, for naval and other purposes, has been under discussion by the United States Government at times since 1870, and it now seems likely that early action will be taken in the premises, as renewed interest in the matter has recently been manifested by public men and engineer officers of the Government.

Building materials.—Good building material abounds in the county. The best of brick are made at reasonable prices, and when the railroad through the Snoqualmie Pass is built, excellent building stone and the best of marble will be brought within easy reach of tide-water.

The city of Seattle.—The city of Seattle is not only the chief city of the county, but of the Territory as well, and contains a population of about 12,000, being nearly twice as large as any other city in the Territory. In the magnitude of its commerce and industries it outranks all others in even greater proportions. It is centrally located on Puget Sound and has one of the best harbors in the world, to which the largest ocean vessels can find unobstructed entrance.

It is the trading port of the Puget Sound basin, on account of its central location, the enterprise of its merchants, and the fact that the steam marine of the sound radiates from its wharves. No less than 30 steamboats of all sizes run from this port to various points on the sound and up the rivers running into it. To this fleet of steamers Seattle is largely indebted for its commercial supremacy. There is a regular line of large ocean steamships to San Francisco from this port. There are also several large steam colliers, and a large fleet of sailing vessels engaged in the coal trade, making this a shipping town of very considerable consequence.

Iron industries.—There are several iron foundries, machine-shops, blacksmith-shops, boiler-works, &c., turning out a large amount of work, and giving employment to many workmen. Some of the machine-shops can turn out engines of large size.

Public works.—There are many miles of graded streets and excellent sidewalks. The gas and water works are equal to the supply of a city of 30,000 inhabitants. Both are owned and operated by corporations.

The water supply is pumped from Lake Washington into elevated reservoirs, the highest being 330 feet. There are 20 fire-hydrants having 4-inch connections, with a pressure that makes each hydrant almost equal to a steam fire-engine. There are also two first-class steam fire-engines and an abundant supply of hose. A well-equipped street railway has been in active operation for a year past.

Prominent buildings.—The city can probably boast a greater number of large substantial buildings than any other of its size on the Pacific coast. Among these are several large and well-kept hotels, splendid brick stores and office buildings, a safe-deposit building, and the largest and handsomest opera-house on the coast outside of San Francisco. Few cities of 100,000 inhabitants in the United States have school-houses equal to two of the public-school buildings of this city. The Sisters' Academy is also a very handsome structure. The Territorial University, with its fine buildings, is located in this city, and the insti-

tution is growing in usefulness. Altogether, the educational advantages enjoyed here are of a very superior character.

Public schools of King County.—Number of school districts, 45; number of school-houses, 42; average value of school-houses, \$2,800; highest cost, \$42,000; lowest cost, \$50; total value of school-houses, \$117,600; number of school children, 4,727; per cent. of attendance, 72; number of teachers, 73; highest salary, \$125 per month; lowest salary, \$35; average salary, \$50.

KITSAP COUNTY.

Kitsap County is situated between the two great arms of Puget Sound, being washed on its western border by Hood's Canal and on the east by Admiralty Inlet. It includes Bainbridge Island, and occupies an area of about 400 square miles. Its principal industry is lumbering, and it has within its limits four of the largest lumber-mills in the Territory, namely, those at Port Blakely, Port Madison, Seabeck, and Port Gamble, whose aggregate capacity is about 600,000 feet per day. Each of these places is a thriving village. The soil and climate are well adapted to the production of vegetables and fruits. The population of the county is 2,638, being considerably increased since the last annual report.

The assessed valuation of property for 1885 is \$1,098,710. Number of school districts, 8; school-houses, 8; school children, 494; average attendance, 67 per cent.; teachers, 12; total value of school-houses, \$7,200; average salary of teachers, \$60 per month.

Mr. R. M. Hoskinson, an experienced meteorological observer, gives the following table of the temperature and rainfall at Port Blakely for the year ended October 31, 1885.

This place is near Seattle, and at the same latitude.

Months.	Average temperature.	Rainfall.
1884.		
November	47½	2.55
December	33½	5.55
1885.		
January	39	10.10
February	44½	5.10
March	47½	0.77
April	50	0.25
May	57½	3.35
June	63½	0.35
July	65½	0.82
August	63½	0.01
September	60	4.27
October	52	4.40
	52½	37.52

KITITITAS COUNTY.

Kittitas County lies near the geographical center of the Territory, and the Columbia River flows along its entire eastern border. Its western limits extend to the summits of the Cascade Mountains. It occupies an area of about 3,600 square miles; is well watered, and in natural fertility of soil is not surpassed by any county in the Territory. It has many farms under excellent cultivation. Large herds of cattle are

reared here, and cattle-dealers find ready markets at eastern points as well as at places on Puget Sound.

This county, hitherto isolated by a lack of railway communication, is now receiving an impetus by the construction of the Cascade branch of the Northern Pacific Railroad, which traverses the county from the southeast to its northwest border.

This railroad is already nearly completed to Ellensburg, the county-seat, and when it is finished to Puget Sound it will furnish an outlet for the vast quantities of grain that this county will produce.

The county has five flouring-mills, all producing an excellent quality of flour. Hops are also found to be a profitable crop, and with proper means of transportation will be more extensively produced.

The western portion of the county is well supplied with timber. Gold, silver, copper, iron, and coal have been found in the mountains, and it is thought that gold, silver, and copper mining will prove profitable. Streams abound with trout, and the game, consisting of bear, deer, grouse, pheasants, and water-fowl, furnish a fine hunting-ground. Population, 2,751; assessed value of property, \$961,702; number of school districts, 23; school-houses, 15; school children, 1,070; teachers, 20; total value of school-houses, \$2,030; average salary of teachers, \$43.

Ellensburg is a thriving business town, having a number of stores and shops, two weekly newspapers, and a population of about 500 people.

KLICKITAT COUNTY.

Klickitat County lies in the southern portion of the Territory, its entire southern boundary being the Columbia River, which flows along its border for upwards of 100 miles. It occupies an area of about 2,000 square miles. There are numerous streams flowing across the county from north to south, and in the valleys of these streams is found soil of wonderful fertility, and noted for the excellence of its cereals and fruits.

The county auditor reports the agricultural productions for the year as follows: Wheat, 350,000 bushels; rye, 500; oats, 150,000; barley, 80,000; apples, 20,000; Indian corn, 8,000; potatoes, 40,000; hay, 2,400 tons; fruit-trees and grape-vines, 25,000. Live-stock: Horses, 3,500; neat cattle, 10,000; mules, 100; sheep, 75,000; swine, 3,000; Angora goats, 500; number of new farms opened up for the year, 300; assessed valuation of property, \$1,205,072; county tax levy, 8 mills; school levy, 6 mills; road and bridge, 1 mill; total population, 4,972; school districts, 36; school-houses, 34; school children, 1,599; average salary of teachers, \$37. The principal towns and villages of the county are Goldendale, Columbia, Centerville, Rockland, Cleveland, and Bickleton. Goldendale is the county-seat.

LEWIS COUNTY.

Lewis County, located about midway between the Columbia River and Puget Sound, occupies an area of upward of 2,000 square miles. It is said to embrace a larger area of fertile agricultural lands than any other county in Western Washington. The Pacific Division of the Northern Pacific Railroad traverses the county from north to south, affording outlets for its products, via Columbia River at Kalama, and rail to Portland and the East, and also, via Puget Sound, to Olympia, Tacoma, and Seattle. The agricultural products of the county are reported as follows: Wheat, 150,000 bushels; oats, 90,000; potatoes, 50,000; apples, 8,000; plums, 25,000; hay, 6,000 tons. Live-stock: Horses, 400; neat

cattle, 4,000; sheep, 3,000; swine, 3,000; number of fruit-trees, 10,000
Manufactures: Five flouring-mills, 11 saw-mills, 2 sash-and-door factories; capital invested, \$150,000; assessed valuation of property, \$1,007,239; population, 5,033.

Coal is found in abundance, but has not been mined. Chehalis, the county-seat, situated on the Northern Pacific Railroad, is an active, flourishing town. Its population is not known. The Lewis County fair is held annually at the county-seat, and is noted for the fine exhibits of fruits, vegetables, cereals, dairy products, and live-stock. There is 1 cheese factory in successful operation near Chehalis, the product from which averages 400 pounds per annum from each cow. Excellent breeds of horses and cattle have been introduced in this county. Centralia, Winlock, and Napavine are growing places on the line of the railroad. School districts, 41; school-houses, 41; school children, 1,627; number of teachers, 55; total value of school-houses, \$7,650; average salaries, \$37. A school for young ladies, known as Grace Seminary, has been organized under the auspices of the Baptists at Centralia. An academy and day school is also in successful operation at Cowlitz Prairie, under the management of the Sisters of Charity.

LINCOLN COUNTY.

Lincoln County, lying in the eastern portion of the Territory, was created by the last session of the Territorial legislature, and contains about 2,500 square miles. This is one of the most productive and promising counties in the Territory, with a rich, prolific soil, and grazing lands that give it prominence as a stock-growing county. The climate is mild and healthful. The agricultural products are reported as follows: Wheat, 275,000 bushels; rye, 3,000; oats, 440,000; barley, 6,000; Indian corn, 7,500; potatoes, 130,000; hay, 13,400 tons; butter, 210 tons. Live stock: Horses, 5,000; mules, 260; neat cattle, 16,000; sheep, 30,000; swine, 3,000. Apple trees, 30,000; plum, 5,000; prune, 2,000; peach, 1,000; grape-vines, 1,000. The Northern Pacific Railroad skirts the southeast corner of the county, and has its extensive shops at the flourishing town of Sprague, which is the county-seat. The population of the county is shown to be 4,247. Assessed valuation of property, \$1,623,495; county levy, 12 mills. Number of school districts, 38; number of school-houses, 31; number of school children, 1,236; total value of school-houses, \$12,000. The village of Sprague boasts of a fine graded school, employing 3 teachers, and occupying a fine two-story brick building, recently built, at a cost of over \$6,000.

MASON COUNTY.

Mason County is bounded on the east by Puget Sound, being touched by both the great arms of that body of water. It has an area of about 900 square miles. Its chief product is lumber, and its vast forests of fir, pine, and cedar contribute largely to the immense supply of logs consumed by the great milling establishments located at different points on the sound. There are two local railroads under construction within the county, one at the head of Little Skookum Bay, and one at the head of Big Skookum Bay. The latter is known as the Satsop Railroad, and is projected to run to Gray's Harbor. This being a heavily timbered county, but little attention has been paid to agricultural pursuits. Fruits and vegetables common to the country thrive well. The population is reported as 809; the assessed valuation of property, \$543,197;

tax levy, 18 mills. Number of school districts, 12; number of school-houses, 12; number of school children, 269; number of school teachers, 8; average salary of teachers, \$30 per month. Oakland is the county-seat.

PACIFIC COUNTY.

Pacific County is located in the extreme southwest portion of the Territory, having water frontage on the Columbia River, Shoal Water Bay, and the Pacific Ocean. The Wilapah, North, Nasel, Wallicut, and Chenook Rivers flow through the finest farm and dairy lands, and afford cheap and quick means of transportation to the markets on the Pacific coast. Much of the fir, spruce, and cedar timber land is unoccupied, and the large bodies of timber on several streams have not been touched. There is a large amount of unoccupied ground suitable for the cultivation of oysters. Large bodies of tide-land have been reclaimed during the last year, and have been found adapted to oats, potatoes, hay, and grasses. On account of the beautiful sea-beach and the delicious oysters and fish here obtainable, thousands of people annually flock to this region to enjoy its resorts during the summer months. There are three large saw-mills, whose aggregate product is 46,000,000 feet of lumber annually, valued at \$460,000. These are the Northwestern Lumbering Company, the South Bend Mill, and the Spring Brook Mill. The logging employs 300 work cattle and 400 men. The Knappton Box Factory turns out an annual product valued at \$15,000.

Salmon canneries.—There are 4 large salmon packing establishments, whose aggregate product is 81,000 cases per annum, valued at \$243,000. These are the Aberdeen Packing Company, the Knappton Packing Company, the North Shore Packing Company, and the McGowan & Sons' Packing Company; 2 other canneries are ordered to be built; 70,000 bushels of oysters, valued at \$70,000, and 1,200 bushels of clams, valued at \$1,800, are exported annually. The oyster-planting has increased during the past year, and the industry is growing into importance. The building of small sailing crafts used in the oyster trade is an important industry. The farm products for last year are reported as follows: Wheat, 7,000 bushels, average 40 bushels to the acre; oats, 60,000 bushels, average 60 bushels to the acre; potatoes, 200,000 bushels; hay, 20,000 tons; apples, 20,000 bushels; pears, 10,000 bushels; plums, 10,000 bushels. Strawberries, cranberries, raspberries, blackberries, gooseberries, and currants are very prolific. The Pacific Cranberry Company has expended \$50,000 in the cultivation of cranberries. Peas, beans, squashes, cabbage, &c., are raised with satisfactory results. Timothy and various clovers thrive abundantly. The annual product of butter is 60 tons; average yield per cow, 200 pounds. Live-stock: Horses, 1,500; cattle, 21,000; sheep, 3,000; swine, 6,000. Assessed valuation of property, \$678,758; county tax, 7 mills. Number of school districts, 23; number of school-houses, 23; number of school children, 530; number of school teachers, 18; value of school property, \$5,125; average salary of teachers, \$30. Population of county, 1,948. The county-seat is Oysterville.

PIERCE COUNTY.

Pierce County was organized 1852, area 1,800 square miles, a large proportion of which is heavily timbered land, but there is a considerable area of rich land in the river and valley bottoms. Population, 1885,

11,565; 1883, 6,177; assessed valuation, 1885, \$5,342,889; increase, about \$1,000,000 over previous year. Number of acres assessed, 157,338.98; increase over 1884, 41,854; acres improved, 5,267.31; increase over 1884, 1,029. Total county disbursements, 1884-'85, \$85,252.07; balance in treasury, April 30, 1885, \$17,709.40; expenditures on roads and bridges, \$17,134.11. Transfers of real estate recorded at auditor's office amount to \$800,000. Agricultural products show a yearly increasing ratio, but in the absence of definite official figures any estimate would be misleading. The 1884 yield of hops approximated 12,000 bales, realizing, at 15 cents per pound, the sum of \$336,000. Number of school districts, 36; school-houses, 34; graded schools, 4; value of public school property, \$39,901; total expenditures, \$24,140.50; children between ages of 4 and 21, 3,061; pupils enrolled, 1,842; daily attendance, 1,269; teachers employed, 64; average monthly salaries, male, \$58; female, \$51.

There are several successful private and denominational schools, including the Annie Wright Seminary for girls, at Tacoma, soon to be supplemented by a boys' school of a similar character, under the care of the Episcopalians; the Sumner Academy, established by the Presbyterians, and a Congregational school at Steilacoom. An Indian primary school is maintained at the Puyallup Reservation. Further details of the Tacoma schools appear under the sub-title Tacoma. There are some 25 church organizations, representing most of the leading denominations, and 18 or 20 church buildings, with others projected.

The manufacturing establishments have been increased during the year by the addition of a flouring-mill of 100 barrel capacity; a woodenware factory and tile works. Iron works, a ship-yard, pork-packing, and other industries are projected for early establishment. The existing branches of manufacture represent an estimated aggregate capital of \$1,600,000, and a gross production of \$900,000, in which lumber in its various forms furnishes about \$450,000. The coal-mining industry exhibits the largest yearly output recorded, embracing 169,080 tons of Carbonado, 31,391 tons of South Prairie, and 4,881 tons of Wilkeson coal, and 352 tons of coke, making an aggregate output of 205,704 tons, of the value of \$822,816, at tide-water. The annual product of the limekilns is 25,000 barrels. The surface indications of petroleum in various parts of Puyallup Valley have led to the formation of a company for the purpose of sinking an experimental well, upon which operations are now in progress. Among the natural attractions of the county is its extended line of sea-shore, its varied and beautiful scenery, and its proprietorship in a large part of Mount Tacoma and its approaches, acknowledged to be one of the grandest mountains in America or Europe.

TACOMA.

Tacoma, the county seat, is situated on the fine harbor of Commencement Bay, the western terminus of the Northern Pacific Railroad; latitude 47° 26' 48" north. Distance to Olympia, 34 miles; to Portland, Oreg., 145 miles; to Saint Paul, via Cascade Division, 1,937 miles; via Portland, 2,057 miles. Population, 1885, 6,936; 1883, 3,180. Assessed value of real estate, improvements, and personal property, 1885 (excluding Northern Pacific Railroad valuations), \$3,113,578; increase over 1884, \$478,402. Disbursements of city government, \$38,203.18, including \$6,423.68 for street improvements. Pupils registered in graded public schools, 969; number belonging, 681; average daily attendance, 625; value of school houses and property, \$30,500; expenditures, \$13,389.82; number of teachers, 15. School census for 1885 shows 1,184

children between 6 and 21 years, and 722 under 6 years. Existing school accommodations being inadequate, 4 additional school-houses are to be provided in the east district for next season, with 5 additional teachers, and the citizens of the west district have voted the sum of \$6,000 for the building of a new school-house. The Annie Wright Institute, endowed by Mr. C. B. Wright, of Philadelphia, and conducted by Bishop Paddock, of the Episcopal Church, is a successful school for the higher education of girls; and a similar school for boys is to be built, endowed and carried on under the same auspices, the citizens of Tacoma having contributed a large sum of money for the boys' school. The educational institutions of Tacoma represent, in blocks and buildings, a sum exceeding \$100,000, besides the Wright endowment of \$100,000 for the girls and boys' school, placing this city in a leading educational position. There are 15 church organizations and Sunday schools, the latter having over 1,000 scholars; value of church property, \$75,000; an active branch of the Young Men's Christian Association, a strong post of the Grand Army of the Republic, 2 hospitals, and the usual complement of benevolent organizations, secret societies, &c.

In public improvements, Tacoma is in advance of most cities of its population. Its water-works embrace a flume from Lake Spanaway, 9 miles long, through which 2,000,000 gallons of water daily flow. A 2,000,000 gallon reservoir, 11.15 miles of main pipes, high and low water systems, with pumping works to supply the high service capable of a sufficient fire-pressure without the use of engines; 45 street hydrants, and a water supply sufficient for 50,000 people. The gas-works have a daily capacity of over 50,000 feet, with 12,480 feet of street-mains and 26 street-lamps. Cost of gas and water-works, \$350,000. The streets are 80 feet and the avenues 100 feet wide, and the entire city can be cheaply drained. The early completion of the Cascade Division Railroad is an event earnestly desired, to insure the commercial independence of this portion of Puget Sound. New buildings, valued at nearly \$350,000, were erected or contracted for during the year, including the Chamber of Commerce 3-story block, which is to be erected this season, at a cost, including the lots, of about \$30,000; three churches; the school for boys, \$34,000, and a number of brick business blocks and fine residences.

Tacoma has become a leading shipping port. The Tacoma Mill Company shipped during the year rough and dressed lumber, lath, pickets, &c., of the estimated value of \$600,000, of which \$450,000 worth was sent to foreign ports. The coal shipments comprised 200,471 tons of Carbonado and South Prairie coal, worth at tide water \$4 per ton, making the total value of lumber and coal shipments, \$1,400,000. At the close of the year it was announced that the ship "Isabel" was loading a cargo of 1,800 tons of tea, valued at \$250,000 at Yokohama, China, for transhipment to Tacoma, and other vessels were seeking wheat cargoes at this port. Including shipments to and from British Columbia and the Sound cities and San Francisco, the commerce transacted and handled at Tacoma during the year 1885 may be reasonably estimated at \$3,000,000. Fifteen to twenty steamers, including the "Olympian", the "George E. Starr", and the "Emma Hayward", are engaged in the local trade, the number hailing from this port being on the increase. The shipping has outgrown the accommodations of the port, and additional dock facilities are demanded. It is expected that next season will witness considerable additions to Tacoma's fleet of steamers, and that ships' ways for repairing vessels will be erected. The hotels are numerous and excellent; the leading one, the Tacoma, being the largest and best appointed public house in the Pacific Northwest.

Meteorological record, Tacoma, Wash.

[Latitude, 47° 16' north; longitude, 122° 26' 48" west. Temperature and rainfall. Elevation of thermometer above mean low tide, 297 feet. Time of observations, 1883, 1884, 1885.]

Months.	Temperature.									Rainfall.		
	1883.			1884.			1885.			1883.	1884.	1885.
	Low-est.	High-est.	Mean.	Low-est.	High-est.	Mean.	Low-est.	High-est.	Mean.			
January.....				26	53	37.2	30	62	37.9	<i>Inches.</i> 3.84	<i>Inches.</i> 4.93	<i>Inches.</i> 4.16
February.....				2	55	37.7	31	59	44.5	1.28	6.72	4.61
March.....				23	59	42.5	32	68	48.0	2.45	1.27	1.01
April.....				35	75	51.5	35	75	50.8	4.91	4.73	.47
May.....				47	78	57.5	43	80	60.5	2.08	.85	2.89
June.....				50	76	58.9	47	76	57.0	.33	2.81	.49
July.....	53	86	62.7	51	76	63.0					.90	
August.....	50	77	62.4	52	89	63.0				.10	1.29	
September.....	46	78	57.0	42	69	54.9				1.54	3.21	
October.....	36	63	48.3	32	62	48.7				2.27	6.73	
November.....	29	55	44.8	34	58	46.0				4.31	1.84	
December.....	20	51	38.8	7	55	29.9				4.50	4.88	
										27.61	40.16	

SAN JUAN COUNTY.

San Juan County embraces the islands of what is known as the Archipelago de Haro, and includes those of San Juan, Orcas, Lopez, Stewart, John's, Decatur, Blakely, and smaller islands. San Juan Island is the largest of the group, and is noted for the production of a very superior quality of lime, which is found in great abundance. Many thousand barrels of this valuable product are manufactured annually, and find a ready market in the cities of Puget Sound, Portland, and even in San Francisco. There is also found in large quantities a very superior quality of fire-clay suitable both for pottery and brick making, which in time will become a very extensive and lucrative industry. Lime deposits are also found on Orcas Island. These islands are very productive, and are noted for their fruit-culture. The apples, peaches, pears, plums, and apricots are of fine size and flavor. The climate is very mild, being tempered by the ocean currents, and the rainfall is very light as compared with that of most localities on the sound. Considerable attention is being given to stock-raising and dairying, and these have been found to be very profitable industries. The soil consists of clay lands, sandy-loams, limestone lands, and black bottom-lands, variously interspersed and adapted to different uses. The scenery is beautiful, and the various islands are attaining prominence as summer resorts. The views from Mount Constitution and Turtle Back, on Orcas Island, are particularly fine. There is an abundance of fine fishing, and the forests abound with deer, grouse, and pheasants. The group of islands embraced in this county have an area of about 500 square miles. Population, 1,053, with an assessed valuation of property stated at \$240,249. Number of school districts, 9; number of school-houses, 9; number of school children, 401; number of school teachers, 9; average salary of teachers per month, \$35; total valuation of school-houses, \$1,500. The principal town in the county is Friday Harbor, the county-seat, situated on San Juan Island. A fish-cannery and oil and glue manufactory has recently been started at Friday Harbor.

SKAGIT COUNTY.

Much of this county is fine agricultural country. That part cultivated lies mainly near the sound, and consists of wide flats and tide lands, which have been carefully diked to prevent overflow. These lands yield prodigious crops of oats. It is estimated that 12,000 tons were raised the present year. La Conner is the county-seat and the principal shipping point. It is separated by a narrow strait from Fidalgo Island, which is within the county. The Swinamish tribe of Indians occupy a reservation near this place. The Skagit River, one of the largest in the western part of the Territory, has its outlet near here. It is navigable for a distance of 80 miles from its mouths, of which there are several, forming a delta. The valley of the Skagit is exceedingly rich and productive. Vast bodies of timber occupy this region back to the mountains. Coal has been discovered on the south side of the Skagit River, in township 35 north, range 6 east. The coal, being suitable for coking, is well adapted to the manufacture of iron. Mr. J. J. Conner states that there are five separate and distinct lodes of iron in this vicinity, which vary from 8 to 50 feet in thickness. This ore worked in San Francisco produced 40 per cent. of iron of superior quality. There is also a large deposit of fire-clay 3 miles southwest from the coal and iron. The population of the county is stated at 2,816. Value of assessed property, \$954,056. Number of school districts, 25; number of school-houses, 20; number of school children, 970; total value of school-houses, \$3,750; number of teachers, 24; average salary of teachers per month, \$45.

SKAMANIA COUNTY.

Skamania County is a rugged, mountainous region, with a narrow bench of cultivated land along the Columbia River. The Oregon Railway and Navigation Company has a portage railroad along the Cascades of the Columbia, which is but little used since the completion of its main line in Oregon. But little attention is paid to farming. The productions of the present year were 700 tons of hay, 10,000 bushels of oats, 5,000 bushels of potatoes, 500 bushels of wheat, and a quantity of fine fruit and vegetables. Population, 625. Assessed valuation of property, \$153,354. County tax rate, 8 mills. No report of schools. The county-seat is Lower Cascades.

SNOHOMISH COUNTY.

Snohomish County is bordered on its western side by the waters of Puget Sound, and drained by two navigable rivers with numerous tributaries, the valleys of which contain large bodies of tide and bottom land. These lands are generally well timbered, but very productive when brought under cultivation. Estimated farm products: Wheat, 5,000 bushels; oats, 80,000; barley, 10,000; potatoes, 200,000; apples and orchard fruits, 20,000; hay, 9,000 tons; hops, 20 tons. Live-stock: Horses and mules, 700; neat cattle, 6,000; swine, 2,000; sheep, 4,000. The high lands occupy about two-thirds of the county. They are generally covered with dense forests of fir, cedar, spruce, and maple. Logging is the chief industry, the estimated annual output of logs being 70,000,000 feet. There is one steam and one water power saw-mill, and one sash and door factory, the value of whose manufactured products is \$75,000. Coal and iron are found; also gold and silver bearing quartz. Placer mining has been conducted, in which were employed

about 50 men. Snohomish City, the county-seat, is a growing village, with 700 inhabitants, churches, school, and free library. Population of county, 2,479. Number of school districts, 19; school-houses, 15; school children, 752. Assessed valuation of property, \$679,746.

SPOKANE COUNTY.

Spokane County, one of the most prosperous and progressive in the Territory, occupies a central position on the extreme eastern border, and is about 36 by 50 miles in extent, containing 1,100,000 acres. Of this amount 681,677 acres are still vacant, offering a fine field for land-hunters. Of the 418,323 acres taken up, 56,486 acres are improved and 361,837 acres not improved. The population by the last Territorial census is 8,891. The county assessment roll is \$3,510,842. The estimated yield of grain, &c., for the year 1885, in Spokane County, is as follows: Wheat, 1,150,000 bushels; oats, 225,000 bushels; barley, 85,000 bushels; potatoes, 325,000 bushels; hay, 22,000 tons. Number of school districts, 55; school-houses, 50; value of school-houses, \$32,078; number of school children, 2,980; number of school teachers, 70; average salary, \$51. Cheney, the county-seat, is located on the line of the Northern Pacific Railroad, 175 miles by rail from Walla Walla and 359 miles from Portland. It contains 1,200 inhabitants. It has 4 churches, 1 flouring-mill, with a capacity of 60 barrels per diem, and a handsome academy, named after Benjamin P. Cheney, its founder. The first grain-elevator built west of the Rocky Mountains is located in Cheney; its capacity is 45,000 bushels.

The city of Spokane Falls is the largest place in the county, and is situated on the line of the Northern Pacific Railroad, 16 miles east of Cheney. The Spokane River here divides into three channels and falls 150 feet in a distance of 1,300, giving the most magnificent water-power in the Territory. The capacity is 144,323 horse-power at low water, and 214,954 horse-power at average water, or considerably more than the power at Minneapolis. The largest saw-mill in the eastern part of the Territory is now in process of erection here. The city also contains three flouring-mills, with a capacity of 320 barrels per diem; one planing-mill, one sash-and-door factory, and one machine-shop and foundry. The city is supplied with water by the Holly system of works, which are the property of the city. They comprise two sets of pumping-engines and over 4 miles of water-mains. There are thirty-six fire-plugs and an excellent fire department. The business portion of the city has electric lights, and there is a telephone system extending everywhere within the city limits.

There are two colleges located at Spokane Falls—a Methodist and a Catholic. Five stage lines center there. There are five churches and two banks. The city assessment-roll is \$991,384, and the population 3,000. The total capital employed in various businesses is \$1,472,000, and the aggregate sales amount to \$3,450,000 annually.

The local markets for the products of Spokane County have largely increased during the last year. The completion of the wagon-road into the Cœur d'Alène mines has given direct connection there, and the building of a steamer on the Upper Columbia has opened a market as far north as the Canadian Pacific Railroad. The lumber manufactured in Spokane Falls is shipped as far west as Yakima City.

Rockford, Medical Lake, Spangle, Waverly, Latah, Manhall, and Deep Creek Falls are flourishing towns. The waters of Medical Lake have

secured a wide reputation for their cures of cutaneous and rheumatic complaints, and attract a throng of visitors each summer.

A railroad is now being surveyed between Spokane Falls and the Little Dalles, and likewise one between Spokane Falls and Farmington, to the southward.

STEVENS COUNTY.

Stevens County lies east of the Cascade Range, and borders on the line of the British Possessions. It occupies an immense area of territory, considerably over 10,000 square miles, extending from the Idaho line on the east to the summit of the Cascade Mountains on the west. The Columbia River traverses the entire eastern portion of the county, back and forth, and then follows its southern border for many miles. The county is generally rough and mountainous, with fertile lands in the valleys. It is well adapted to stock-raising, possessing fine range for grazing. The mountains are said to contain gold and silver, and the mining industry is beginning to attract great attention. A personal observer writes as follows:

Never, we venture to say, has a mining district of such genuine worth and substantial-looking prospects as may be seen in the Colville district been known of for so long a period and attracted less people to it, or occasioned less excitement at home or abroad, than has this one. A ride of a few days through the mountains around us will convince any one that has eyes that he is in a mineral country. In nearly every cañon within 20 miles of us may be seen quartz of some description, projecting from the surface, and in many places prospectors will be found quietly working away, convinced that they have good prospects, and preparing to open them out. Our entire district has been much favored by nature. Its natural resources are unbounded. A rich and fertile valley is in the center of it, already cultivated, and prepared to supply grain, vegetables, and meat, to a large number of people, at reasonable prices. Water of the very best quality is at the "flap" of every man's tent; sometimes in quantities sufficient to run heavy machinery, and again in small streamlets, but always clear, cool, and drinkable. Vast forests of pine and fir are everywhere available, to furnish timbers for the lining of shafts and tunnels, and to supply any number of furnaces with fuel. The mines are, compared with those of other districts we have seen, easy of access to teams, and a railroad will, with little doubt, ere long run at the very base (through a natural pass) of the mountains which hold them.

Agricultural pursuits have been but little engaged in, owing to the remoteness from market. The population is stated at 1,278, and the assessed valuation of property is reported at \$374,266. The Moses Indian Reservation occupies a large part of the county. Colville is the county-seat.

THURSTON COUNTY.

Thurston County, with a territorial area of about 600 square miles and a population of 4,337, occupies nearly a central position in Western Washington. Olympia, a beautiful town of about 2,500 inhabitants, is the county-seat and also the Territorial capital. United States land offices and the office of the surveyor-general are also located here. It has two private educational establishments, one conducted by the Sisters of Charity (Roman Catholic) and one by the Methodists. It also has one national bank, gas and water works. Located at the southern extremity or head of Puget Sound, Olympia is noted for its homelike aspect, orchards and flower gardens surrounding the majority of its residences. It has its fair share of manufacturing establishments; three saw-mills, a clam cannery, sash and door and furniture factory. The Puget Sound Pipe Company's works, for the manufacture of Horton's patent water-pipe, are located here, and are building an extensive

factory. The Episcopalians, Catholics, Methodists, Presbyterians, Baptists, and Congregationalists have churches in the city. It is also the location of the United States Signal Service office. Tumwater, a village about 1 mile south of Olympia, utilizes the picturesque Tumwater Falls in the manufacture of flour, say 12,000 barrels annually, lumber, sash and doors, furniture, and water-pipes. Seatco, on the Northern Pacific Railroad, is the seat of the Territorial penitentiary. An immense sash-and-door factory, supplied with the latest and best machinery, has just been established with a view to the employment of convict labor. The total output of the lumber mills of Thurston County is about 9,000,000 feet annually, principally used in home markets. Agriculture, including the production of hay, grain, fruit, and vegetables, takes a prominent rank in the industries of the county. Grain raised in Thurston County took the premium at the Centennial Exposition in Philadelphia in 1876. Extensive deposits of coal have been discovered and located in the county; these deposits await development. An aggregate of 50,000 bushels of grain is reported for the current year of this report. Of live-stock there are about 15,000 head. The assessment-roll of the county foots up \$2,075,496; tax-levy, 17 mills. Number of school districts, 37; value of school-houses, \$8,000; number of school children, 1,400; average salary paid to teachers, \$33.33.

WAHKIAKUM COUNTY.

Wahkiakum County has the Columbia River for its southern border. It occupies an area of about 400 square miles, mostly mountainous and heavily timbered. The desirable agricultural land is limited and confined to the few creek and river bottoms. Fruits and vegetables thrive remarkably well. The chief industry of the people is salmon-fishing and canning, there being seven large canning establishments in the county. Number of school districts, 15; number of school-houses, 15; number of school children, 412; number of teachers, 15; total value of school-houses, \$1,500; average salary of teachers, \$37. The county contains a population of 1,365, and the assessed valuation of property is reported to be \$317,246. The county-seat is Cathlamet, situated on the Columbia River.

WALLA WALLA COUNTY.

Walla Walla County, lying in the southeastern portion of the Territory, is one of the earliest settled and most famous portions of the Territory. As a grain-producing region it is unrivaled by any country in the world. Over three million bushels of grain were produced the present year in this county. According to the report of the county assessor, 170,052 acres were cultivated the present year, of which 102,128 acres were in wheat; 14,055 acres in barley; 1,908 acres in oats; 1,778 acres in corn; 1,447 acres in timothy, and 649 acres in rye. Summer fallowed ground, 49,087 acres. The production of wheat averages over 25 bushels per acre; barley, 40 bushels per acre; oats, 45 bushels per acre; corn, 30 bushels per acre. Live-stock on hand is reported as follows: Horses, 6,668; cattle, 4,902; sheep, 33,284; hogs, 5,228. There is much excellent grazing land in the county. Live stock is shipped to the East by the car-load. Timber is readily obtained from the Blue Mountains. There are 4,000 acres of grain hay, on which two tons per acre are raised. Good butter and cheese are produced. There is considerable business in leather and hides. The soil and climate here are adapted to the cul-

tivation of the choicest vegetables and fruits. Peaches, grapes, and apricots are raised. Not only the well-watered valleys, but the foothills and higher table-lands produce excellent crops. The facilities for transportation are especially favorable, as the county is bounded on the north by the Snake River, and on the west by the Columbia River; and the road of the Oregon Railway and Navigation Company, with its branches, accommodates the southern and central portions of the county. The population is reported at 10,312; assessed valuation of property, \$5,794,727. No school report from this county has been received. Walla Walla, the chief town and county-seat, ranks deservedly high in wealth, enterprise, and the excellence of its educational facilities. There are 4 private institutions of learning in this city, namely, St. Paul's (Episcopal), Whitman College (Congregational), St. Vincent's Academy for girls and St. Patrick's for boys, both of the latter under the control of the Roman Catholic Church. There are many fine public and private buildings in this city, among which are the public-school building, college buildings, court-house, and hospital. Fort Walla Walla, a well-garrisoned United States Army post, is situated at the outskirts of the city of Walla Walla. Waitsburg, near the eastern line of the county, is a thriving town, and has a well-conducted college. Prescott and Wallula are small but prosperous places.

The following is a meteorological report of Walla Walla for the year ended September 30, 1885, as reported by Mr. Isaac Straight:

Table showing the lowest, highest, and mean temperatures, also amount of rainfall, Walla, Wash. a

Month.	Lowest.	Highest.	Mean.	Rainfall.
	Degrees.	Degrees.	Degrees.	Inches.
October.....	36	73	51.97	2.65
November.....	28	59	42.40	0.77
December.....	17	51	21.00	5.02
January.....	4	55	29.00	1.61
February.....	28	69	45.21	2.39
March.....	34	74	53.80	0.06
April.....	32	76	57.56	0.05
May.....	48	86	64.42	4.22
June.....	39	90	68.27	2.01
July.....	60	97	75.21	0.00
August.....	58	105	72.18	0.02
September.....	44	85	64.15	0.69
				19.49

WHATCOM COUNTY.

Whatcom County, in the northwest corner of the Territory, at the northern end of Puget Sound, extends southward from the British line about 25 miles, and eastward from Puget Sound about 80 miles, and therefore contains in the neighborhood of 2,000 square miles. The eastern portion is mountainous, exceedingly picturesque, and heavily timbered with white pine, fir, cedar, and spruce. In the western portion magnificent belts of fir and cedar alternate with extensive river-bottoms of vine, maple, and alder. Numerous lakes with surroundings of Swiss picturesqueness dot the county, chief among which is Lake Whatcom, 12 miles long by 1 to 1½ miles wide, with a depth, in places, of 400 feet, situated some 3 miles from Bellingham Bay, and having a surface elevation of about 300 feet above the bay level. The surplus waters of the lake flow through Whatcom Creek to the city of What-

com, located at its mouth on Bellingham Bay, and furnish a majestic water-power, capable of moving the enginery of scores of factories. A company is about to pipe the waters of the lake to Whatcom and other towns along the shore of Bellingham Bay, having demonstrated the fact that with a fall of 300 feet a store of water is available of sufficient magnitude to supply the domestic and mechanical requirements of a city as large as London. The lumber resources of the county are immense and comparatively untouched. The fir and cedar attain enormous dimensions. Three saw-mills are now located upon Bellingham Bay, one at the town of Bellingham, having a capacity of 75,000 feet per day, and a Michigan company will soon commence the construction of another and larger one at New Whatcom, and will also construct a railroad to Lake Whatcom, the timber around which, at a low estimate, amounts to 300,000,000 feet. The large acreage of river bottoms affords an excessively fertile region for agriculture. The alder and vine maple with which they are covered is easily cleared. All kinds of grasses grow luxuriantly, and the alder-bottom of one season becomes the pasture-land and garden of the next. Roots and vegetables of every description attain a phenomenal size, and are unsurpassed in flavor and keeping qualities. Pre-eminently is Whatcom County the land of fruits and berries, the favorable conditions of climate and soil apparently charging the products of horticulture and the orchard with all the elements of perfect development. In the interior of the county, along the numerous valleys of the Nooksack River and its tributaries, corn, peaches, and other products requiring warmer nights and a temperature of greater average height than that of the coast, mature readily and yield prolifically. Tobacco of a superior quality is successfully grown. Stock thrives upon the plentiful grasses and clovers indigenous to the soil. Poultry is remarkably free from the diseases usually preying upon domestic fowls. Fish and game are abundant. Fine large salmon have sold on Bellingham Bay during the last season for from 3 to 10 cents each. The streams and lakes swarm with trout. Along the shores of the bay salmon trout of delicious flavor are plentiful. Famous halibut banks lie a few miles out from Bellingham Bay. Cod in numerous varieties, flounders, and other salt-water fish are not only abundant but very cheap. Oysters are plentiful; while clams, crabs, and mussels can be had by the cart-load. Dogfish are exceedingly abundant and are caught in great numbers for their oil. At Point Roberts, at the northwestern corner of the county, is probably the best salmon-fishing station in the entire Northwest. Deer are killed in great numbers which make the business a butchery. Grouse and pheasants abound in the woods. Geese and ducks in astonishing numbers cover the waters of Bellingham Bay during the winter season. Elk are found in the eastern part of the county, while the bear and cougar lurk in the deeper recesses of the forest.

The mineral deposits of the county consist chiefly of iron and coal, the former as yet undeveloped. Vast deposits of bog-iron ore exist in the northern part of the county. Extensive coal-beds have been found in various localities in the vicinity of Lake Whatcom, and have been developed enough to prove the existence of practically inexhaustible veins of an excellent quality of bituminous coal. Gold has been discovered along the Upper Nooksack and its tributaries, but the early fall rains have interrupted the work of the miners before the extent of the deposits could be ascertained. The Chuckanut Bay sandstone of this county is justly celebrated as an elegant and durable building material. The incorporated city of Whatcom is the county-seat, situated

on Bellingham Bay, a magnificent land-locked body of water 6 miles in length by 3 in width, furnishing an absolutely safe anchorage and harbor for the largest vessels. The Bellingham Bay and British Columbia Railroad, about 2 miles of which is completed from New Whatcom, will eventually connect that point and the lines of traffic centering at the bay with the Canadian Pacific. Settlement has steadily progressed during the past few years, and the county is becoming populous with a strong, vigorous, and energetic class of men. Number of school districts in the county, 23; number of school-houses, 20; average value of school-houses, \$300; highest cost, \$2,000; lowest cost, \$25; total value of school-houses, \$8,000; number of school children in the county, 958; per cent. of attendance, 67; number of teachers, 21; highest salary, \$75; lowest salary, \$20; average salary, \$35. The climate of Whatcom County, and especially at Bellingham Bay, is admirable. The rainfall is not excessive; there are no moss-covered roofs. An agreeable temperature prevails. Puget Sound, upon its western shore, has a wonderfully equalizing influence upon the climate. The waters of this vast Mediterranean of the north are ever ebbing and flowing to and from the sea. Colder than the surrounding atmosphere under the vertical rays of the sun, they absorb its heat and moderate the warmth of midsummer, while the genial Japan current, which finds its way through the Straits of Fuca and to the shores of Bellingham Bay, constantly parting with its surplus caloric during the colder months, tempers the rigors of midwinter. These and other exceptional circumstances undoubtedly make the western part of Whatcom County one of the favored localities of the globe.

WHITMAN COUNTY.

Whitman County is another of the great grain-producing counties of the Territory. It has an area of about 1,025,000 acres, of which there were seeded this year about 71,500 acres. The average yield of wheat is reported to be 35 bushels per acre. Wheat-raising ranks first, stock-raising second; in importance. The total grain yield is estimated at 2,500,000 bushels for the present year. Stock-raising is giving way to agriculture. Compared with figures of 1884, the number of sheep and cattle is reduced about 10 per cent. Population of county, 10,473. Assessed value of real estate, \$1,189,639; improvements on same, \$494,652. Assessed value personal property, \$1,815,623; total valuation, \$3,499,914. In the county are 6 flouring mills and 5 saw-mills. The Columbia and Palouse Railroad, a branch of the Oregon Railway and Navigation Company's road, traverses the entire length of the county, east to west, about 112 miles. The Farmington branch, junction at Colfax, will undoubtedly be built next year in time to move the crop.

Principal points in the county are: Colfax, Palouse City, Pullman, Farmington, Garfield, Endicott, Almota, Pine City, Uniontown, Colton, Penawawa. Colfax is the county-seat. Number of school districts, 90; number of school-houses, 75; number of school children, 4,014; number of teachers, 135; total value of school buildings, \$37,500; average salary of teachers, \$40. An academy under the patronage of the Baptist Church is located at Colfax.

YAKIMA COUNTY.

Yakima County is situated near the center of the Territory, having the Cascade Range of mountains for its western and the Columbia River for its eastern boundary. It has a vast body of pastoral lands,

and supports large herds of cattle, horses, and sheep. The soil of the hills and plains is composed of basalt and volcanic ash. The valley lands are of the same elements, more or less accompanied by alkali. Fields of this soil have borne crops for thirty consecutive years without fertilizers. It is unfortunate that so large a portion of this county is occupied by the Yakima Indian Reservation, yet there is a vast region still open to the settler. The Attaluum, Wenas, Moxee, Selah, and Natches Valleys are especially adapted to agriculture, and with but little irrigation produce fine crops of wheat, hops, corn, tobacco, sorghum, and a choice variety of vegetables, including lima beans and sweet potatoes, also fruits, including peaches, grapes, and melons. Extensive improvements in irrigation are planned, and if they are accomplished this region will be wonderfully rich and productive. Hundreds of small ditches have already been constructed, and the good results are apparent. There is no difficulty in obtaining water from the abundant streams having a snitable fall. The construction of the Northern Pacific Railroad through the heart of the county has given additional impetus to farming, and has brought in many settlers. There are now 112 acres devoted to hops. The yield of grain is reported as follows: Wheat, 35 bushels per acre; barley, 45 bushels; oats, 55 bushels, and corn 45 bushels per acre. The climate in summer is quite warm, resembling that of certain favorite parts of California, but the heat is modified by mountain breezes, and the nights are comfortable. There are no fogs, and an overcast sky is seen but few days in the year. The winter days are bright and the atmosphere is then dry. The spring is early and the showers are then frequent. It rains but little from the 1st of June to the 1st of September. The following estimate of live stock is reported: Cattle, 20,000; horses, 7,000; sheep, 30,000; hogs, 5,000. An excellent class of people are coming into this county, and education is receiving their attention. Number of school districts, 22; number of school-houses, 14; number of school children, 1,038; number of school teachers, 25; total value of school buildings, \$10,500; average salary of teachers, \$55. A large academy building, situated 2 miles from Yakima City, has recently been completed as a college for boys, under the management of the Catholic Church. The total population of the county is stated at 3,428. The assessed valuation of property is \$2,077,706. The principal towns of the county are Yakima City, the county-seat, and North Yakima, the temporary terminus of the Northern Pacific Railroad. These towns are but 4 miles apart. The town of North Yakima was founded at the commencement of the present year, 1885, and has a population of about 1,000 people. The United States land-office has recently been removed from Yakima City to North Yakima, and the latter town seems to have made rapid strides during the short time of its existence, having pure water led by irrigation to course at each side of its streets, and miles of young trees planted for shade. Prosser, situated on the railroad near the falls of the same name on the Yakima River, is the shipping point for that region of country known as "Horse Heaven." The soda springs in the county are delightful resorts for health and pleasure.

DEFENSES.

Upon careful consideration of this subject I have recently forwarded the following communication to the honorable Secretary of the Navy:

SEATTLE, June 25, 1885.

SIR: The undersigned, the governor and chief justice of Washington Territory, the mayor and other citizens of Seattle, respectfully represent to the Secretary of the

Navy that the towns of Port Townsend, of Seattle, of Tacoma, and of Olympia, and other settlements on Puget Sound and Admiralty Inlet lie within a few hours' sail of Victoria and Esquimalt, which are in the colony of British Columbia and in the Dominion of Canada.

(2) That at Esquimalt the British Government is now establishing a naval station capable of repairing its men-of-war, and that a fleet of vessels is usually maintained by Great Britain in these waters.

(3) That the channels of Admiralty Inlet and Puget Sound are commodious and without hidden danger, and are therefore favorable to an enemy strong upon the seas.

(4) That these channels are now not defended by fixed or floating batteries, torpedoes, or any means of defense, and that in consequence the considerable communities residing upon these waters will be exposed, upon outbreak of hostilities with Great Britain, to a sudden and formidable attack which there is at present no means of resisting.

(5) That the United States do not maintain a fleet upon the Pacific coast capable of meeting the English squadron on anything like equal terms; that the nearest naval establishment of the United States is in the bay of San Francisco, nearly 1,000 miles distant.

(6) That the waters of Puget Sound offer one or more sites which we believe to be conveniently fitted for a great naval establishment, and that such an establishment is essential for the defense of these waters.

(7) That we believe that the lakes situated near the city of Seattle, known as lakes Union and Washington, are peculiarly fitted for the purpose, our belief being based upon the facts that they are fresh water with depths of many fathoms; that they can be made accessible from Admiralty Inlet by a canal about 1 mile in length, the construction of which promises no engineering difficulties; that these lakes are never frozen; that they are bordered by extensive forests of fir, which is the best timber in the country for ship-building purposes; that good coal is extensively mined on the banks of Lake Washington, and that iron ore is found in abundance in the neighborhood.

The climate is mild and salubrious, and remarkably even throughout the year, and especially mild in winter when we consider the latitude.

The country is rapidly increasing in population, and it appears to us that if our Government is ever to construct a naval station in our waters, that it will be to its great advantage and in the interest of economy to select the site and acquire the necessary lands at an early day.

In view of the defencelessness of our waters and the advantages which we believe to belong to Puget Sound, we respectfully ask that the Navy Department will cause the circumstances herein presented to be examined by one or more naval officers, or by a board of Navy and Army officers, or in such other way as may be approved by the good judgment of the Department.

WATSON C. SQUIRE,
Governor.

R. S. GREENE,
Chief Justice, W. T.

JOHN LEARY,
Mayor, Seattle.

BAILEY GATZERT,
President Chamber of Commerce, Seattle.

The Hon. SECRETARY OF THE NAVY,
• Washington, D. C.

In this connection I desire to call attention to the following important report recently made by General Miles, lately commanding the Department of the Columbia, concerning the defenses of Puget Sound:

HEADQUARTERS DEPARTMENT OF THE COLUMBIA,
Vancouver Barracks, Wash., July 7, 1885.

SIR: I desire again to call attention to the importance of the fortifications at the entrance of Puget Sound.

In company with Colonel Mendell, Major Jones, and Captain Powell, of the Engineer Corps, I have recently visited the principal points that have heretofore been mentioned in several communications from these headquarters, and am fully impressed with the necessity of the Government taking such action as will secure proper defense to the great commercial interests of Puget Sound; these are constantly increasing every year, and have now reached such magnitude as to become of national interest.

Many reports have been forwarded and are now on file in the War Department, and particularly in the office of the Chief Engineer of the Army.

Last year I detailed a board of experienced officers, consisting of Major Rodgers, Captain Taylor, and Captain McMurray, to examine the subject, and their report was forwarded to division headquarters.

Many valuable points have been reserved; but I regard the two main entrances to Puget Sound as of the first importance for present consideration, viz: Admiralty Inlet and Deception Pass. Suitable ground commanding the entrance to Deception Pass has been reserved by the Government. That at Admiralty Head, Point Wilson, and Marrowstone Point has been reserved only in part, and a sufficient sum should be appropriated in addition to that required for defensive works to secure a permanent title to the Government.

One objection to any action being taken toward the defense of this inlet has been the distance between Point Wilson and Admiralty Head, about 4 miles; but this, it is believed, can be greatly overcome by the use of modern appliances.

I recommend that the attention of Congress be called to this subject in time for action during the coming session.

The British Government is now expending a large amount of money in completing its navy-yard and dry docks at Esquimalt, near Victoria, British Columbia, and has kept during the past ten years from a single ship of war to a small fleet in these waters; and I think it advisable that our Government should take an equal interest in the establishment of a naval station in this part of the United States. Several reservations have been made on the Straits of Fuca and Puget Sound for naval purposes.

What point is best suited for all the requirements of the Navy could probably best be determined by a board composed of Naval officers.

Lake Washington, near Seattle, has many advantages for such a purpose, it being a lake of fresh water, and in close proximity to the deep water of the sound.

I request this communication be referred to Colonel Mendell for remark.

Very respectfully, your obedient servant,

NELSON A. MILES,

Brigadier General Commanding.

THE ASSISTANT ADJUTANT-GENERAL, DIVISION OF THE PACIFIC,
Presidio San Francisco, Cal.

UNITED STATES COAST AND GEODETIC SURVEY.

This important branch of the General Government has had three parties operating on the waters of Puget Sound since the beginning of the fiscal year. During this time the hydrography of Hood's Canal has been completed, and that of Port Orchard will be finished this fall, thus completing the survey of the main waters of the sound from Olympia to Dungeness.

Triangulation and topography have been commenced in Possession Sound and in Rosario Strait, and are being executed as rapidly as possible with the small amounts appropriated for this work.

A complete and accurate map of these waters is much needed to meet the demands of a large and constantly growing commerce.

It is desirable that a resurvey of the water front both at Seattle and Tacoma should be made, to embrace the extensive improvements which have been made at these points since the survey of them was completed.

The approaches to the town of La Conner should be carefully surveyed, and the channel marked by beacons.

The grain export from this town is placed at twelve thousand tons, and the product must have transportation by water from this point.

ADMISSION.

Thirty-two years have elapsed since the organization of Washington Territory. In its nature, and according to precedent, Territorial government is provisional and temporary. The self-government conferred by statehood is in accordance with the genius of American institutions. There is an implied, if not an expressed, guaranty to the settler that when the Territorial community shall have attained numbers, strength,

and permanence, with a population assimilated in kind to that of the States, he shall be clothed with all the powers of citizenship, which he relinquished when he left his early home in the East, and came, under conditions oftentimes of hardship, to help found and build up a new and loyal State in the West.

I beg leave to repeat the following from my last annual report:

"Some of the reasons qualifying this Territory for early admission into the Union may be summed up as follows:

"First. The people are active, enterprising, and intensely loyal citizens, homogeneous with the people of the Eastern and Middle States upon the same lines of latitude, who have built up the institutions of a *substantial and enduring society*, and they unanimously desire admission.

"Second. This is the only political division on the continuous seaboard of the United States which remains in a Territorial condition.

"Its present and prospective maritime relations with the world entitle it to political importance and consideration.

"Third. This Territory is situated on the distant confines of a strong, active foreign power, whose interests also on the seaboard are great and growing in this part of the world.

"Fourth. In wealth of natural resources Washington Territory is second to no region of the United States. In the accumulated wealth of its people it is making rapid strides; in population it is entitled to admission.

"Fifth. Among the benefits which the Territory would realize from the act of admission are the following:

"(1) The allotment of school lands.

"(2) Settlement of riparian rights on Puget Sound and other deep-sea waters.

"(3) Encouragement to capital and immigration.

"(4) Participation in valuable political privileges as citizens of a State.

"(5) Control and management of municipal, county, and State affairs not now permitted by the organic act.

"It seems to me that every consideration for the interest of the whole country points to the propriety of early and decisive action by Congress favorable to the claims of the Territory."

THE CHINESE.

By the Territorial census of 1885 there were 3,276 Chinese residents in the Territory. Many of them have heretofore been usefully employed as servants, and as laborers in the mines and on the railroads and public works. During the period of business depression a strong popular agitation has recently sprung up, in a few large places, having for its object the expulsion of Chinese from our midst.

The hostile feeling against Chinese has been greatly increased by reason of failure on the part of the Government to adequately enforce the restriction act, large numbers of Chinese having stolen into the Territory from the neighboring province of British Columbia in violation of law. It is often difficult to identify them; and the customs force in this district is evidently too small to prevent the wholesale smuggling, both of goods and Chinamen.

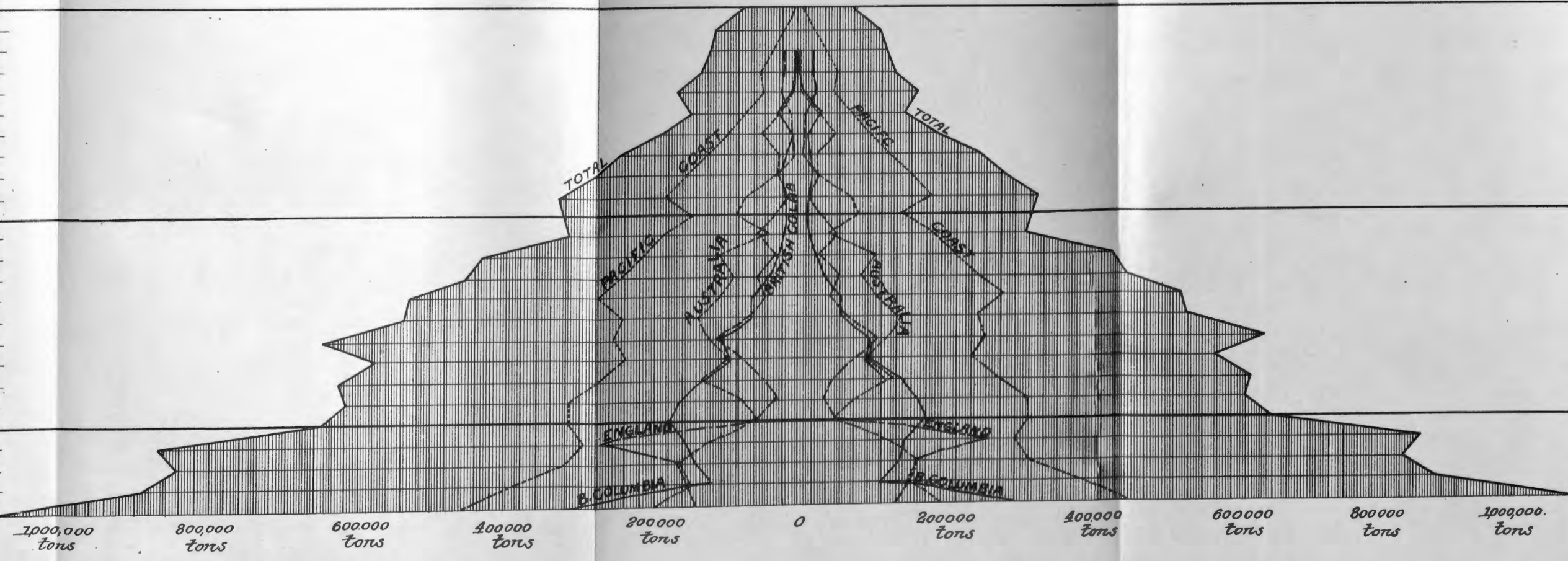
The recent discharge of a large number of Chinese laborers heretofore employed in constructing the Canadian Pacific Railway increases the number of those who would evade the restriction act.

Diagram illustrating Progress
of the
PACIFIC COAST COAL MARKET
and the
Sources of Supply

Compiled from newspaper reports and other sources.

James D. Jones
Mining Engineer

YEAR.	ENGLAND tons	AUSTRALIA tons	BRITISH COLUMBIA tons	PACIFIC COAST tons
1860.	6640			8631.
1861.	23565			21305
'62	22010	3833	6015	37462
'63	16756	6387	3413	53550
'64	24140	5913	9790	48494
'65	10849	27682	21937	74425
'66	8220	51551	9066	97252
'67	4564	25165	14653	123840
'68	28859	31701	22790	158229
'69	13446	70319	16779	184082
'70	28859	84251	13979	145907
1871	55478	38751	16004	185685
'72	28059	110111	23574	214678
'73	57156	91100	32327	244584
'74	46932	107010	62672	279539
'75	65932	139164	62110	244498
'76	116836	129097	101572	256345
'77	76750	92768	98842	239667
'78	46722	137684	143241	271801
'79	31911	77522	165102	314537
'80	61779	51137	178334	318643
1881	267940	125780	153541	298151
'82	163643	165353	144816	317872
'83	155102	150318	117822	390597
'84	139504	200769	298335	450000



OTHER SOURCES tons	TOTAL tons	YEAR
	77600	1860
	116,200	1867
51,180	120,500	'62
55,494	135,600	'63
78,963	167,300	'64
15,207	150,100	'65
26,511	192,600	'66
88,678	248,900	'67
40,421	282,000	'68
44,374	329,000	'69
49,504	320,500	'70
19,282	315,200	1871
58,078	434,500	'72
29,433	454,600	'73
35,747	531,900	'74
26,496	538,200	'75
45,650	649,600	'76
68,773	576,800	'77
27,252	626,700	'78
29,428	618,500	'79
44,207	654,100	'80
23,488	868,900	1881
51,816	843,500	'82
72,761	886,600	'83
	1,088,608	'84

The following passages are quoted from a letter addressed to me last year by Capt. C. L. Hooper, of the United States Revenue Marine, who was lately on duty in this district.

Complaints are frequently made that the restriction act is not enforced by the customs official, that Chinamen are crowding into the Territory without hinderance, &c. I ask your attention to some of the obstacles encountered by the revenue officer in this matter.

First. There is nothing to deter the Chinaman from making the attempt. No penalty attaches to him. He even is not required to bear his own expenses in returning to the port from whence he came; consequently he keeps trying until he succeeds. Some of them have been detected and sent back so often that their faces are quite familiar to the customs authorities. The facility with which white men escape the penalty for aiding the Chinese, encourages dozens of worthless characters to engage in the business. If caught, unless actually engaged in stepping from the boat to the shore, which occupies but a moment of time, they are acquitted. There are thousands of Chinamen just without the border waiting for an opportunity to get in. Plenty of worthless characters are ready to assist them, and all passenger steamers ready to carry them, provided it can be done without risk. The facilities offered for smuggling Chinamen as well as dutiable goods by way of the San Juan Archipelago are well known. These islands are inhabited by farmers and sheep-raisers; and while a large majority are honest and industrious men, there is no lack of confederates to assist the smuggler in concealment, until a favorable opportunity to complete his voyage. Indeed, some of them openly declare themselves smugglers and defy the law. The proper enforcement of the Chinese restriction act would alone require more men than now constitute the entire force of the customs service in the district, yet with all this additional duty and increasing commerce of the district, the customs force, with possibly one or two additional men, remains the same as before the act went into effect.

The fact is well established that Chinamen and large quantities of opium are being brought into the Territory in violation of law, and that it will continue until there is a large increase in the customs force in the district.

I believe the above statements to be true now, as they were then; and the evasions of law have been still more aggravating. Hence, *for the purpose of promoting domestic tranquillity*, I would strongly urge upon the Government the necessity of increasing its customs force in this locality.

While a vast majority of the people of the Territory are disposed to enforce the existing laws, yet the fact cannot be disguised that in so doing they labor under serious embarrassments, owing to the aforesaid grievances. The feeling among our laboring class is that they cannot stand an extended competition with Chinese cheap labor. Therefore I feel it to be my duty to respectfully recommend, through you, to Congress the necessity of *protective legislation*, such as the revision of the restriction act, and even to suggest the advisability of revising or repealing the Burlingame treaty itself.

It gives me pleasure to express my obligation to Prof. George F. Whitworth and J. F. Jones, esq., mining engineers; Major Jones, United States engineer, Hon. James G. Swan, of the United States Fish Commission, and all the other gentlemen who have so ably aided me by statistical and other data.

I am, sir, very respectfully, your obedient servant,

WATSON C. SQUIRE,

Governor.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.